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ABSTRACT

In 1987, Seattle Central Community College (SCCC), in Washington, began a 5-year project to gather evidence on SCCC's success in imparting knowledge, skills, and values to its students. This report represents a compilation of major assessment activities and provides brief descriptions of 10 studies on outcomes grouped by specific dimensions of learning. The first section, Fundamentals, describes studies on the correlation between placement tests and performance in English courses, a comparison of student educational background and goals to performance in English courses, an analysis of humanities writing samples, tracking English-as-a-Second-Language students, a comparison of student math performance with their math backgrounds, tracking student progress from lower level to higher level math courses, and a survey of faculty on student writing. The second section, Expertise, discusses a vocational follow-up survey, measuring student outcomes in terms of employment, while the third section, Multi-Cultural Literacy, features a report on a curriculum for cultural pluralism. Critical thinking is the topic of section 4, which reports on a study of the differences in learning between coordinated studies students and students in discrete courses. Section 5 deals with Multiple Outcomes and discusses results of five versions of a self-evaluation of student learning completed by faculty and students from spring 1990 to summer 1992. Appendixes include a list of SCCC student and institutional outcomes reports and activities, a list of other campus student outcomes activities, student learning self-evaluation checklists, research abstracts, and a chronology of student assessment activities. (MAB)

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Seattle Central Community College

Learning Outcomes Assessment Activities 1989 - 1992

Prepared By
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Planning and Research Office
Title III / Student and Institutional Outcomes Project
June 1992

JC 930 058

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EXECUTIVE SUMMARY

INTRODUCTION

During Fall quarter 1987, Seattle Central Community College (SCCC) began the Title III Student and Institutional Outcomes (SIO) Project. Soon afterward, the state legislature mandated that student learning assessment practices occur at all the state colleges. The first two years of the five-year SIO project saw the establishment of a Student Outcomes Task Force and the creation of the Seattle Central Community College Model of Student Learning. During the final three years, several assessment activities have been initiated at SCCC by the SIO project and the SCCC Planning and Research Office. The following report is a compilation of the major assessment activities that have occurred.

The SCCC Model of Student Learning

The Student Outcomes Task Force submitted to the campus community a "Model of Student Learning." The Model takes the form of a matrix comprised of four learning categories and 11 learning dimensions. The Model has served as a focus for assessment and outcomes activities on the campus. The Model has been incorporated into the campus' curriculum review process, faculty development training, cultural pluralism curriculum revisions, classroom research, and student course evaluations.

The findings of the studies contained in this document have been categorized according to the learning dimensions as they are found on the SCCC Model of Student Learning.

SUMMARY OF RELATED INSTITUTIONAL STUDIES AND FINDINGS

LEARNING DIMENSION: FUNDAMENTALS

English Reading and Writing

* Regardless of course-taking history, demographic characteristics or placement test scores, 80% of the students enrolled in English 101 received a "C" grade or better.

* Degree-seeking students (academic transfer and professional/technical students) continued from English 101 to English 102 at higher rates (27%) than non-degree-seeking students (10%).

* Professional/technical students completed English 102 with a "C" or better at a higher rate (81%) than academic transfer students (67%).

* It appears likely that the placement scores for the Humanities Writing Sample are dependent to some degree on which of the six stimulus questions an applicant is asked to respond to. For one of the questions, 36% of the students were referred to English 101, as opposed to 61% of the students responding to a different question.

* While tracking the progress of students enrolled in transitional ESL courses, we found that 56% of the students continued on to English 101, and 16% continued on to English 102. 88% of the ESL students enrolled in English 101 received a "C" grade or better.

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* English faculty members have held two retreats to more clearly define the learning objectives of English 101, English 102 and a new course, English 103.

* In a campus-wide survey, faculty, campus-wide, reported that the most important areas in evaluation of writing assignments are (1) content, (2) clarity of expression, and (3) organization. Students' greatest weaknesses were reported to be (1) grammar, (2) spelling, and (3) sentence structure.

Computation

* Math students enroll in the math courses recommended by their placement scores. Only 1% of 202 students enrolled in a math course not recommended by their scores.

* 50% of the Math 101 students receive a "C" grade or better. Students performing least well are those who previously enrolled in two developmental math courses (26% received a "C" or better).

* 40% of the Math 101 students have previously enrolled in Math 101.

* Developmental math grades correlate with Math 101 grades, and might be used to monitor and advise students.

* Students' chances of successfully completing developmental math courses or Math 101 do not increase if they re-enroll in the same math course.

* Math faculty have responded to these issues by securing National Science Foundation Grants to support improvements in the quality of math education at SCCC. With support from another Title III project, they are currently revising the sequence of learning outcomes throughout the math curriculum.

LEARNING DIMENSION: EXPERTISE

Vocational Student Follow-Up Surveys

* 228 respondents to a survey of former professional/technical students selected learning outcomes from the Model of Student Learning which were of most value on the job. In order they were (1) working collaboratively with others (68%); (2) applying learning to new situations (63%); (3) adjusting to new situations (62%); (4) defining and solving problems (61%); and (5) thinking about and learning from experiences (61%).

* 84% of the respondents accomplished their educational goal; 92% use their SCCC training on the job; 84% would choose SCCC again if they could start all over.

* When surveyed by the State Board for Community and Technical Colleges, employers responded to six items that were also learning outcomes on the SCCC Model of Student Learning. SCCC faculty were surveyed on these same items. Employers were most satisfied with former students' "ability to speak effectively," and were least satisfied with their "ability to write effectively." Faculty members thought "ability to define and solve problems" was the most essential learning outcome from their programs, while "ability to write effectively" was the least essential.

LEARNING DIMENSION: MULTI-CULTURAL LITERACY

Curriculum Revision of 30 Courses

Faculty have revised the curriculum for 30 courses to incorporate multi-cultural themes and approaches. Some faculty have designed strategies to measure the effect of the altered curricula, including pre/post tests, observation of behavioral changes and student self-assessment.

LEARNING DIMENSION: CRITICAL THINKING

No Measured Differences Between Coordinated Studies and Other Students

29 students in the Coordinated Studies Program (CSP) and 45 non-CSP students responded to 52 questions from the Cornell Critical Thinking Test. The average scores of both student groups were the same as the average scores of other four-year college freshmen. CSP students scored slightly higher than non-CSP students.

MULTIPLE OUTCOMES

Student Perceptions of Their Learning vs. Faculty Perceptions

Are students' perceptions of their learning the same as their instructors' perceptions of student learning? A Student Learning Self-Evaluation checklist derived from the SCCC Model of Student Learning has been administered to several groups of students, faculty and staff since Spring 1990. Three major surveys were conducted during Spring 1990, Spring 1991, and Winter 1992. The survey results have consistently shown that professional/technical students and instructors are more in agreement about the learning occurring in their courses than are the students and faculty of academic transfer courses.

Student Perceptions of Their Learning and the Revision of the Model of Student Learning

Factor analysis of the Student Learning Self-Evaluation survey results are being used as a focal point of discussion regarding the revision of the Model of Student Learning. A revised Model for discussion and adoption will be proposed to the campus community during Spring quarter 1992.

A Self-Regarding Institution - 150 Student and Institutional Outcomes Reports Produced

The SIO Project and the Planning and Research Office have produced nearly 100 individual reports for the campus regarding all levels of student and institutional outcomes. These reports have assisted faculty, administrators and staff in the planning and operation of programs, and the revision of curricula.

Student Outcomes Activities Initiated Elsewhere On-Campus

Other student outcomes-related activities, not supported by SIO but directly incorporating the SCCC Model of Student Learning, have occurred at SCCC. These activities included classroom research training workshops, coordinated studies research projects, learning outcomes training workshops, and alternative pedagogies training workshops. Several of the participants in these and other activities have revised their curricula to better respond to the Model of Student Learning and the assessment of student learning.

State Supported Assessment Activities

Since 1990, the Higher Education Coordinating Board has provided monies to support assessment activities on the campus. During 1990-1991, five faculty assessment coordinators were given release-time to foster and promote assessment discussions and activities within their administrative units. Also during AY 1990-1991, four issues of an intra-campus newsletter, Inside Outcomes, were distributed throughout the campus. Additionally, SCCC faculty presented at each of three annual state-wide WAG assessment conferences, specialists have been hired to provide assessment-related training to faculty, and faculty members have been sponsored to attend national and international conferences.

Collaboration with National Center on Teaching, Learning and Assessment Regarding Collaborative Learning Environments

As part of a national study of collaborative learning communities, students in coordinated studies programs and discrete humanities and social science courses completed the Beginning Student Questionnaire and the College Student Experiences Questionnaire. Interviews were conducted with students in the Coordinated Studies courses. Follow-up questionnaires and interviews were completed Spring 1992.

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INTRODUCTION

EDUCATIONAL OUTCOMES ASSESSMENT: WHAT AND WHY?

In what is recognized as a classic essay within the field of educational outcomes assessment, Peter Ewell defines "educational outcomes" as "changes in student knowledge or abilities resulting from the learning process" (Ewell:7).[1] Ewell classifies three types of educational outcomes. (1) Knowledge outcomes refer to general knowledge as well as knowledge of specific fields of study. (2) Skills outcomes refer to learning to perform specific tasks. Among the examples Ewell cites are verbal skills, writing skills, quantitative skills, human-relations skills, creative-thinking skills and physical-motor skills. (3) Attitude or value outcomes "consist of the affective impacts of . . . education" (Ewell:37). Values and attitudes include those that students develop about self as well as more general values and attitudes about others and society.

Seattle Central Community College has used Ewell's model in its approach to educational outcomes assessment. For the past several years (1987-1992), the college has engaged in an "explicit, systematic and participatory" (Ewell:9) process of defining the most important outcomes it is trying to achieve with its students, and of measuring whether those outcomes are in fact occurring for students.

This volume describes those efforts. It begins with a description of the learning outcomes themselves and then goes on to describe studies undertaken to assess the achievement of the outcomes. The studies described here vary in their focus--some target specific skills such as writing or math, while others attempt to measure more general knowledge or attitude outcomes such as multi-cultural literacy. The studies differ in their methods--tracking studies of student cohorts, surveys of faculty and students, portfolio assessments, etc. The studies also differ in the clarity of their findings and in how immediately and directly those findings can be applied to improving educational practices.

Amid all of this variety, however, the studies have a common theme: they aim to gather evidence as to whether we are helping our students learn the knowledge and skills and develop the attitudes and values we think are most important. On the basis of such evidence we seek to determine what changes are needed in our educational practice. Quoting Ewell once again: "Self-definition and self-examination constitute the first and most important steps toward ongoing self-improvement" (Ewell:9).

FOR WHOM IS THIS BOOK WRITTEN?

- Those who support higher education--the public and legislators who appropriately ask "what are you doing with the money we have entrusted to you?"

- Those who are pursuing higher education--the students who have a right to know which values educational institutions espouse.

- Those faculty, staff and administrators who are working in the service of student learning.

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[1] All references are to The Self-Regarding Institution: Information for Excellence, Ewell, Peter, National Center for Higher Education Management Systems, Inc., Boulder, CO, 1984.

By describing our experience defining what is important to us, and our efforts to assess our success in achieving what is important, we hope to give others ideas and encouragement about how they can engage in similar self-reflective processes. As individuals and as an institution, we have found it a challenging yet renewing experience. We believe it has improved and continues to improve our work with students. We hope that our experience will help others create similar experiences.

A Brief Chronology[1]

Seattle Central began its work with student learning outcomes in 1987. In that year a task force of faculty was convened by the Dean of Instruction to begin to identify the most important knowledge, skills and attitudes we wish to help students achieve.

The task force met throughout 1988-89, studying what other colleges were doing to identify and assess outcomes. Peter Ewell (National Center for Higher Education Management Systems) and Patricia Hutchings (American Association of Higher Education) consulted with the group. In the Spring of 1989, the task force reached consensus on a "working draft" of a list of learning outcomes which was published as the Model of Student Learning (see page MSL-2).

For the next three years, the college used this "working draft" to advance the work of outcomes assessment on campus. The Model was presented and discussed with the wider college community through a series of forums. Training was provided to faculty to write learning objectives and revise teaching methodologies. Support was given to faculty to revise curricula to incorporate given outcomes from the Model into existing or new courses, and to assess whether students were actually learning the identified outcomes. Colloquia were arranged so faculty could share their outcomes work with colleagues.

Concurrent with these activities, several studies were conducted. Among the studies were three annual surveys of faculty and students. These annual surveys were used to gauge student and faculty perceptions of the presence/absence of each of the outcomes in the curriculum as a whole. The results of the annual surveys were used by the task force to revise and refine the Model. In the Spring of 1992, a final version of the Model was adopted by the task force.

What Does the Future Hold?

Seattle Central regards this document as an important milestone in its outcomes assessment journey, but certainly not as the end of that journey. It represents a significant and timely summary of what we have accomplished thus far. By pausing to collect these findings and to reflect on what they have taught us, we are better able to decide upon the next steps to be taken. It is clear to us, as it will be to anyone reading this book, that there are many areas that remain open for further study, reflection and action. It is our intent to pursue those areas.

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[1] A more complete chronology can be found in Appendix E.

THE SEATTLE CENTRAL COMMUNITY COLLEGE MODEL OF STUDENT LEARNING

A HISTORY OF THE MODEL OF STUDENT LEARNING

The Student Outcomes Task Force Established in 1987-1988

Seattle Central Community College began its work in the area of student outcomes in 1987-1988, with support from a Title III grant. At that time, a Student Outcomes Task Force was established comprised of approximately 20 faculty, staff and administrators. Over the next two years, nationally-recognized experts were brought in as consultants to the task force, including Peter Ewell, Pat Hutchings and Patricia Cross. The task force members also visited other colleges renowned for their assessment efforts, including Alverno College, King's College, the University of Tennessee at Knoxville, the Florida State community college system and Mount Hood Community College.

The SCCC Model of Student Learning Proposed to the Campus Fall 1989

After discussions, consultations and debates, the Student Outcomes Task Force reached consensus about a proposed matrix of learning outcomes for the college. The matrix identified the learning objectives the task force felt the college was or should be achieving with its students. The matrix was later named the Seattle Central Community College Model of Student Learning. President's Day, Fall 1989, was devoted entirely to the topic of outcomes assessment, at which time the Model of Student Learning was introduced to the campus at-large (see page MSL-2).

How to View the SCCC Model of Student Learning

The Student Outcomes task force members believe the Model indicates progressive development in learning. The Model can be read from left to right. In the far left column are four broadly conceived "categories" of learnings. The "dimensions" to the right of each category more precisely define and give "body" to the learning "categories." The Model suggests development. For example, within the first category (Prepared for Next Phase of Life...), some readers see progressively more sophisticated learnings implied in moving from "Fundamentals" to "Expertise" to "Organizational Abilities." The Model may be viewed as a composite of our purpose as an educational institution, not a prescription for what each of us should be doing.

The SCCC Model of Student Learning Used as a Focus for Assessment Activities

Since its unveiling in Fall 1989, the Model of Student Learning has served as the focus of assessment and outcomes activities on the campus. For example, the Model has been incorporated into the campus' program-wide curriculum review process, faculty development training, cultural pluralism curriculum revision, classroom research, and student course evaluations. A cross-reference between the Model of Student Learning and the student outcomes studies and reports found in this document can be found on page MSL-3.

SEATTLE CENTRAL COMMUNITY COLLEGE MODEL OF STUDENT LEARNING

--- CATEGORIES ---	DIMENSIONS		
PREPARED FOR NEXT PHASE OF LIFE, WHETHER FURTHER EDUCATION, A PROFESSION, PERSONAL OR COMMUNITY LIFE	**FUNDAMENTALS** - ENGLISH READING/WRITING - COMPUTER LITERACY - COMPUTATIONAL - ORAL COMMUNICATION - INFORMATION SEEKING/PROCESSING	**EXPERTISE** - MASTERY OF DISCIPLINE/VOCATION - ABLE TO MARKET MASTERY AREA	**ORGANIZATIONAL ABILITIES** - ABLE TO WORK IN GROUPS - ABLE TO NAVIGATE THE BUREAUCRACY - ABLE TO ACCESS/CREATE SYSTEMS FOR SUPPORT
EDUCATED PERSON AND LIFE-LONG LEARNER	**MULTI-CULTURAL LITERACY** - KNOWLEDGE OF IDEAS AND EXPERIENCES SHAPING HUMAN HISTORY - ETHICS AND VALUES - ESTHETIC AND CREATIVE EXPRESSION - INTERDISCIPLINARY CONNECTION-MAKING	**CRITICAL THINKING** - DEFINING PROBLEMS - IDENTIFYING RELATIONSHIPS - PROJECTING CONSEQUENCES OF ACTIONS - REASONING, ANALYSIS, LOGIC - DECISION-MAKING/PROBLEM-SOLVING - CLASSIFYING, DISCRIMINATING, ORDERING - CONCEPTUALIZING/ABSTRACTING - COMBINING THEORY AND PRACTICE - QUESTIONING - CONSTRUCTING AN IDEA AND ADDING TO A BODY OF KNOWLEDGE - LEARNING FROM EXPERIENCE: MISTAKES AND SUCCESSES	**LIFE-LONG LEARNING** - FINDING PLEASURE IN LEARNING - CURIOSITY ABOUT THE WORLD - DISCOVERY - SELF-REFLECTIVE - LEARNING FROM MISTAKES: COMMITMENT TO RENEW ONESELF - SATISFACTION WITH SCCC EXPERIENCE
INFORMED CITIZEN OF DIVERSE, INTERDEPENDENT, CHANGING WORLD	**KNOWLEDGE OF DIVERSITY AND INTERDEPENDENCE** - KNOWLEDGE OF SYSTEMS - USING CROSS-CULTURAL PERSPECTIVES	**SOCIAL RESPONSIBILITY** - LITERACY: ENVIRONMENTAL, MEDIA, MULTICULTURAL, NUMERICAL, SCIENTIFIC, STATISTICAL - AWARE OF CONNECTIONS: SELF AND WORLD - COMMUNITY-BUILDING	**SOCIAL INTERACTION** - FLEXIBILITY - ABLE TO WORK COLLABORATIVELY WITHIN DIVERSITY - ABLE TO EFFECT CHANGE - SENSITIVITY/RESPECT FOR OTHERS - VALUING LIFE EXPERIENCES AND DEVELOPMENT OF OTHERS - ABLE TO GIVE/TAKE CRITICISM - CAPABLE OF REARING NEXT GENERATION - MANAGING CONFLICT - EMPATHY AND TOLERANCE - ACTIVE PARTICIPATION AND ENGAGEMENT
PERSONAL EMPOWERMENT AND INTERPERSONAL FACILITY	**SELF-ESTEEM** - RECOGNIZE STRENGTHS AND LIMITATIONS - UNDERSTAND PERSONAL MOTIVATIONS - PHYSICAL FITNESS AND WELLNESS - SELF-CONFIDENCE - MANAGING STRESS AND CHANGE - RISK-TAKING	**RESPONSIBLE ACTION** - RECOGNIZE AND ACT ON ONE'S CONVICTIONS/GOALS - RECOGNIZE AND CRITIQUE ETHICAL ISSUES - ABLE TO ARTICULATE GOALS/VALUES - UNDERSTAND CONSEQUENCES OF ACTIONS - PRESERVE INDIVIDUALITY WHILE WORKING FOR COMMON GOOD	

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Cross-Reference: Reports/Studies by Learning Dimensions

On this page, the reports and studies found in this document are listed within the Learning Dimension to which they relate. Because some of the studies and reports involve more than one Learning Dimension, an additional category called "Multiple Outcomes" has been added at the bottom of the page.

STUDENT AND INSTITUTIONAL OUTCOMES
ASSESSMENT STUDIES AND REPORTS (as of 4/92)

--- CATEGORIES ---	DIMENSIONS: FUNDAMENTALS	DIMENSIONS: EXPERTISE	DIMENSIONS: ORGANIZATIONAL ABILITIES
PREPARED FOR NEXT PHASE OF LIFE, WHETHER FURTHER EDUCATION, A PROFESSION, PERSONAL OR COMMUNITY LIFE	STUDY 1: ENGLISH PLACEMENT/GRADES STUDY 2: ENGLISH STUDENT BACKGROUND/GRADES STUDY 3: WRITING SAMPLE ITEM ANALYSIS STUDY 4: TRACKING ESL STUDENTS STUDY 5: MATH PLACEMENT/GRADES STUDY 6: TRACKING MATH STUDENTS STUDY 7: STUDENT WRITING ASSESSMENT	STUDY 8: VOCATIONAL STUDENT FOLLOW-UP SURVEYS	
EDUCATED PERSON AND LIFE-LONG LEARNER	MULTI-CULTURAL LITERACY REPORT 1: CULTURAL PLURALISM GRANTS	CRITICAL THINKING STUDY 9: CORNELL CRITICAL THINKING TEST CSP STUDENTS VS. NON-CSP STUDENTS	LIFE-LONG LEARNING
INFORMED CITIZEN OF DIVERSE, INTERDEPENDENT, CHANGING WORLD	KNOWLEDGE OF DIVERSITY AND INTERDEPENDENCE	SOCIAL RESPONSIBILITY	SOCIAL INTERACTION
PERSONAL EMPOWERMENT AND INTERPERSONAL FACILITY	SELF-ESTEEM	RESPONSIBLE ACTION	
MULTIPLE OUTCOMES MEASURES	STUDY 10: STUDENT LEARNING SELF-EVALUATION SURVEYS STUDY 8: VOCATIONAL STUDENT FOLLOW-UP SURVEYS STUDY 9: BEGINNING STUDENT QUESTIONNAIRE / COLLEGE STUDENT EXPERIENCE QUESTIONNAIRE / INTERVIEWS APPENDIX A: STUDENT AND INSTITUTIONAL OUTCOMES/PLANNING AND RESEARCH: REPORTS / PRESENTATIONS / ACTIVITIES		

STUDY 1: COMPARISON OF STUDENTS' PERFORMANCE ON THE ENGLISH PLACEMENT TESTS AND THEIR PERFORMANCE IN ENGLISH COURSES

Study Conducted Fall 1989 to Fall 1991

PURPOSE OF THE STUDY

Monitoring the Validity of English Placement Tests

A previous study during the Fall of 1986 revealed low correlations between the English placement test scores and English 101 grades. The correlation for the APS Reading Test scores and English 101 grades was .35, the correlation between the Writing Sample scores and English 101 grades was .29, and the correlation of the Reading Test scores and the Writing Sample scores was .23. The findings of this study were intriguing; however, the small number (n=166) of English 101 students taking placement tests warranted a replication of the study to verify the findings. Low correlation scores between placement tests and subsequent course performance may indicate that the placement tests may not be valid for use with our students.

METHOD

Comparing the Reading and Writing Placement Scores With English 101 Grades

All students who enrolled in English 101 during AY 1988-89 were selected for this study. Only students receiving decimal grades or "No Credit" letter grades were considered for the sample. APS Reading Test scores, and Writing Sample test scores were obtained for those students who took these tests. English 101 grades were obtained for all students in the sample. Correlation coefficients between the placement test scores and English 101 grades were calculated. Correlations between the reading test scores and the writing test scores were also calculated.

RESULTS

1126 students enrolled in English 101 during AY 1988-1989 and received a decimal grade or "No Credit" letter grade. Of these students, 803 took the Writing Sample placement test and 658 took the APS Reading Test. 293 students did not take either test.

Low Correlations Between Placement Scores and English 101 Grades
The Pearson correlation coefficient for APS Reading Test scores and English 101 grades is .25
The coefficient for the Writing Sample scores and English 101 grades is .07. The coefficient between test scores is .32.

80% of Students Successfully Complete English 101, Regardless of Placement Scores

Approximately 80% of the students enrolled in English 101 received grades of "C" or better, regardless of their placement test scores or whether they took a placement test.

Reading Test Placement	Percent Passing English 101
Pre-College	82%
English 101	82%
No-Test	83%
Writing Sample Placement	
Pre-College	80%
English 101	79%
No-Test	80%

COMMENTS

Determining the Validity of Placement Tests Not Possible

The purpose of this study was to examine the validity of the current placement tests in predicting the performance of students in English 101. This goal was not accomplished. Instead, it was discovered that students successfully complete English 101 at the same rate regardless of their placement scores, or lack thereof.

Students Enroll in English 101 Despite Low Placement Scores

Many students (24%) enroll in English 101 without taking placement tests, or with test scores placing them at pre-college English levels. These findings were unexpected and follow-up investigation was warranted.

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

Students Enroll in College-Level English 101 Using Established Avenues

The results of this study indicate that 25% of our sample of students were enrolling in English 101 without taking placement tests or with low placement test scores. The concern raised is that students may be gaining access to English 101 through avenues not intended. A sample of 111 students was selected from the original 1126 students in the study. Each student file was examined to discover how the student was able to enroll in English 101. All 111 students did enroll in English 101 through approved means: placement test scores, completion of developmental English courses and transitional ESL courses, self-advised students, evening students, previous AA degree earned, teacher recommendation, or completion of English 104.

The Writing Sample Better Predicts English 102 (Research Writing) Grades

The results of this study suggest that placement scores are not a discriminating predictor of English 101 grades. There appears no reason to expect placement test scores to predict the performance of English 101 students. Does this hold true for English 102 (research writing course) as well? 46 students took placement tests and enrolled in English 102 during AY 1988-89. The correlation

coefficient for English 102 grades and Writing Sample scores is .42. The APS Reading Test scores had a correlation of .16 These results indicate that, while the Writing Sample placement test scores might be used to predict the performance of English 102 students, the APS Reading test does not.

Findings and Follow-up Activities Discussed with English Faculty

The findings of this study and the subsequent investigations raise very interesting questions. If placement test scores are not an accurate prediction of student performance in English 101, then are these tests valid screening devices? On the other hand, if the placement tests are indeed measuring the ability of students to read and write, then perhaps the requirements for successfully completing English 101 need to be examined. The next step was to present these findings to the English faculty for discussion and reaction. The faculty, in turn, developed some questions for further investigation. Study 2 (see page F-4) examines the questions raised by the faculty regarding student background and goals.

Comparison of Asset Reading and Writing Test Scores with Humanities Writing Sample Scores and English 101 Grades - Fall 1991

Seattle Central Community College began administering the ACT Asset Reading and Writing Tests to students preparing to enroll in courses during Fall 1991. The Asset Reading Test scores were used for student placement into English reading courses. The Humanities Writing Sample was used for student placement into English writing courses. The Asset Writing Test was administered to students, but not used for placement purposes.

During August and September 1991, 1752 students took both the Asset Writing Test and the Humanities Writing Sample. 792 students (45%) were placed at the same writing level by both tests. Of the 1023 students placed at college-level by either test, 575 (56%) were placed at college level by both tests. The Pearson correlation coefficient for both test scores was .57 ($p<.01$).

During the same time period, 1843 students took both the Asset Reading Test and the Humanities Writing Sample. 1084 students (59%) were placed at the same English level by both tests. Of the 1240 students placed at college-level by either test, 691 (56%) were placed at college-level by both tests. The Pearson correlation coefficient for both test scores was .51 ($p<.01$).

158 students subsequently enrolled in English 101, Fall 1991, after taking the Humanities Writing Sample. 153 students enrolled in English 101 after taking the Asset Writing Test. 143 students (90%) were placed at college-level by the Humanities Writing Sample, and 105 students (69%) were placed at college-level by the Asset Writing Test. 100% of the students (N=15) who were not placed at college-level by the Humanities Writing Sample passed English 101 with a "C" grade or better. 88% of the students (42 of 48 students) not placed at college-level by the Asset Writing test passed English 101 with a "C" or better.

The results of the study were shared with the Associate Dean of Student Services, the English faculty, and the Dean of Instruction.

STUDY 2: COMPARISON OF STUDENTS' EDUCATIONAL BACKGROUND AND GOALS, AND PERFORMANCE IN ENGLISH 101 AND ENGLISH 102

Study Conducted Spring 1990

PURPOSE OF THE STUDY

To Determine if Student Educational Goals and Background Affect English Grades

It was determined in Study 1, and in follow-up activities, that regardless of a student's English placement test scores, a student has an 80% chance of passing college-level English 101 with a "C" or better. Naturally, this situation resulted in low correlation scores between placement test scores and English 101 grades. However, the Writing Sample test did show a much stronger correlation with English 102 grades. These findings were presented to the English faculty for discussion. As part of their response, the faculty wished to determine if the students' educational goals related to their English 101 and English 102 grades. In addition, the faculty also wished to determine if the number of quarters of developmental English courses related to English 101 and English 102 grades.

METHOD

Tracking Students from English 101 to English 102 by Student Intent and Quarters of Developmental English

For this study, two samples of students were selected. One sample was selected to examine the relationship between student intent codes and English 101 and English 102 outcomes. For this purpose, all students enrolled in English 101 during Academic Year 1988-1989 (N=1226) were selected. Student intent codes were obtained for the quarter in which they were enrolled in English 101. Students were then tracked during the following quarters to determine how many enrolled in English 102 prior to Winter 1990, and what their grades were for English 102.

The second sample was selected to examine the performance of developmental English students in English 101 and English 102 prior to Winter 1990. For this purpose, our sample consisted of students who enrolled in developmental English courses from Summer 1985 to Spring 1989 (N=3120). Students were then tracked to determine how many developmental English courses each student enrolled in, and whether they moved on to English 101 and English 102.

RESULTS

1226 students enrolled in English 101 during AY 1988-1989. 292 students subsequently enrolled in English 102 by Fall 1989 (24%). 882 of the 1226 students had "Academic Transfer" student intent codes (72%), 140 students had "Professional/Technical" student intent codes (11%), and the remaining 204 students had 5 other non-degree seeking student intent codes (17%).

Degree-Seeking Students More Likely to Enroll into English 102

The results of the tracking studies show that about 70% of all student intent categories complete English 101 with a grade of "C" or better. One-fourth of the degree-seeking students (academic transfer, professional/technical) enrolled in English 101 will also enroll in English 102, compared to one-tenth of non-degree-seeking students (Table 1).

Professional/Technical Students Complete English 102 at a Higher Rate

Professional/technical students completed English 102 with a "C" or better at a higher rate (81%) than the academic transfer students (66%) or non-degree seeking students (60%).

Table 1. Tracking Student Enrollment and Performance From English 101 in English 102 by Student Intent Code and Amount of Developmental English.

Student Intent Code	Number Enrolled In English 101	Percent Completing English 101 With "C" or Better	Percent Enrolled In English 102	Percent Completing English 102 With "C" or Better
Academic Transfer	882	73.8%	26.8%	65.7%
Professional/Technical	140	74.3%	25.7%	80.6%
Other Intent Codes	204	67.3%	9.8%	60.0%
Totals	1226	72.7%	23.8%	67.1%
Quarters of Developmental English				
One Quarter	685	77.1%	39.3%	71.4%
Two Quarters	320	77.2%	38.1%	59.0%
Three Quarters	130	74.6%	35.4%	65.2%
Four Quarters	63	88.9%	31.7%	50.0%
Five-Plus Quarters	81	86.4%	16.0%	76.9%
Totals	1279	78.0%	36.7%	66.8%

Students with Fewer Developmental English Quarters are More Likely to Enroll in English 102 from English 101

1279 students were identified as having enrolled in English 101 after taking at least one quarter of developmental English. 39% of the students who enrolled in English 101 and had just one quarter of developmental English subsequently enrolled in English 102. This is a slightly higher rate than the students who had four quarters of developmental English (32%), and a much higher rate than those students who had five or more quarters of developmental English (16%).

No Relationship Between English 102 Completion and Number of Quarters of Developmental English

470 students were identified as having enrolled in English 102 after having taken English 101 and at least one developmental English course. Of these 470 students, 314 received grades of "C" or better in English 102 (67%). From the results in Table 1, there appears to be no relationship between the number of quarters of developmental English and English 102 grades. 71% of the students having only one developmental English course received an English 102 grade of "C" or better, while 77% of the students taking five or more developmental English courses received similar grades.

COMMENTS

Student Background and Characteristics Correlate with English 102 Grade Distribution, but Not English 101 Grade Distribution

The results from Study 1 show that, regardless of a student's score on two English placement instruments, that student had an 80% chance of passing English 101 with a "C" or better. For these same students, the Writing Sample placement instrument predicted to some degree (r=.41) the student's outcome in English 102. The English faculty then wanted to find out if there were differences between the students enrolled in English 101 and the students in English 102. The results from this study would suggest that the students' educational backgrounds and goals do not appear to affect the students' abilities to pass the courses.

While the educational backgrounds and goals of English 101 students appear to have no relationship with English 101 grade distributions, there does appear to be a negative relationship to the distribution of "A," "B," and "C" letter grades in English 102 and the number of quarters of developmental English courses taken. 23% of English 102 students who took one developmental English course received "A" letter grades, compared with 8% of English 102 students who took five or more developmental English courses.

Perhaps the two most interesting results of this study are (1) the apparent greater success of professional/technical students to successfully complete English 102, and (2) regardless of educational background, educational goals or placement scores, a student has a 75% to 80% chance of successfully completing English 101.

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

Partly in response to the results of Studies 1 and 2, and partly in response to dialogues between the English faculty and the Dean of Instruction, the English faculty have held two retreats to discuss and more clearly identify the learning objectives for English 101, English 102 and a new course, English 103. The dialogue is continuing into Spring 1992.

STUDY 3: THE HUMANITIES WRITING SAMPLE: AN ITEM ANALYSIS

Study Conducted Spring 1991

PURPOSE OF THE STUDY

To Determine If the Humanities Writing Sample Topic Questions Affect Placement Scores

The Humanities Writing Sample (HWS) is used to determine the placement of students into appropriate English writing courses. Students are asked to write a narrative response to one of six question topics. In three previous studies, the HWS scores have been compared with standardized writing and reading test scores. In Fall 1986, the Pearson correlation between APS Reading Test scores and HWS scores was .23, and for AY 1988-89, the same tests had a correlation of .32. For Fall 1991, the correlations for the HWS scores and Asset Reading scores was .51, and HWS scores and Asset Writing scores was .57. Due in part to the varying correlation coefficients, the English faculty decided to examine the HWS more closely. The purpose of this study is to determine whether the topics on the HWS instrument influence the placement score.

METHOD

Stratified Random Sample of Writing Sample Test Scores by Test Item

For this study, a stratified random sample of Humanities Writing Sample test scores was selected. 390 HWS test scores from 1990-1991 were obtained, 65 scores for each of the six topics used for the instrument. A chi-square analysis was performed to determine if differences between test scores are statistically significant.

RESULTS

The tabulation of the results are shown in Table 1 below. 65 HWS scores from each of the six topics were examined. The topic questions were complete and thorough sentences; they have been abridged in the table below.

Topic Question Scores Are Significantly Different from One Another

From the sample of 390 HWS test scores, 188 scores (48%) recommended students to English 101 (college-level composition). 202 scores (52%) recommended students to developmental English courses. Chi-square analysis of the topic questions by recommended English courses indicates statistically significant differences in test scores by topic question item ($p<.02$, 13.5 degrees of freedom).

Table 1. Writing Sample Test Score Results by Topic Question.

Topic Question	English Writing Placement Level: Recommended to English 101 N	%	Recommended to Developmental English N	%
1. Event in your life	38	58%	27	42%
2. Ideal learning environment	40	61%	25	39%
3. Change about yourself	25	38%	40	62%
4. Television	32	49%	33	51%
5. Life different than parents	29	45%	36	55%
6. Improve neighborhood	24	37%	41	63%
Total	188	48%	202	52%

COMMENTS

Placement Scores Are Dependent Upon the Topic Questions Selected

It appears from the chi-square analysis that it is very likely the Humanities Writing Sample placement score is dependent to some degree on which topic question a student is asked to answer. Ideally, each of the topic questions would produce the same number of referrals to English 101. This does not appear to be the case for this instrument. Topic questions regarding "ideal learning environment," "change about oneself," and "improve neighborhood" appear to be particularly sensitive to this condition.

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

It would appear from the results of this study that a student has a much better chance of being recommended to English 101 if s/he is allowed to respond to topic questions One or Two (60% chance) rather than questions Three, Five or Six (40% chance). It will be important for the English faculty to determine if this sample is indeed representative of all Writing Sample placement test scores and, if so, to determine a course of action.

The results of this study have been shared with the English faculty and the Dean of Instruction.

STUDY 4: TRACKING ENGLISH-AS-A-SECOND-LANGUAGE STUDENTS INTO COLLEGE-LEVEL ENGLISH COURSES

Study Conducted Spring 1990

PURPOSE OF THE STUDY

To Determine the Number of Transitional ESL Students Moving on to Developmental and College-Level English Courses

Transitional ESL courses are designed to prepare students who do not speak English as their native language for enrollment in college-level English courses. The purpose of this study is to determine at what rate transitional ESL students enroll in developmental and college-level English courses. This study also examines the performance of transitional ESL students in English 101 courses.

METHOD

Transitional ESL Students during AY 1986-87 and/or 1987-88

For this study, the sample included all students enrolled in ESL 097 and/or ESL 099 courses during AY 1986-1987, and/or 1987-1988. The enrollment data for these students for subsequent quarters was obtained for developmental English courses, English 101 (college-level composition), and English 102 (college-level research). Enrollment data were collected for English courses taken through Fall 1989.

RESULTS

56% of Transitional ESL Students Enroll In English 101

302 students enrolled in ESL 097/099 during AY 1986-87, and/or AY 1987-88. Of these 302, 150 students (50%) subsequently enrolled in developmental English courses. 75 students (25%) enrolled directly in English 101. In total, 168 (56%) of the 302 students enrolled in English 101 by Fall 1989. 47 students (16%) enrolled in English 102 by Fall 1989.

Table 1. Progression of Transitional ESL Students To Developmental and College-Level English Courses.

Students In Transitional ESL Courses	Count	Percent of Students Enrolled in Subsequent English Courses: Developmental English	Directly Into English 101	Total Into English 101	English 102
ESL 097 Only	77	49.3%	5.2%	42.9%	5.2%
ESL 099 Only	95	45.2%	35.8%	63.2%	26.3%
ESL 097 and 099	130	53.1%	28.5%	57.7%	13.8%
TOTAL	302	49.7%	24.8%	55.6%	15.5%

88% of Transitional ESL Students Who Enrolled in English 101 Receive "C" or Better

168 transitional ESL students enrolled in English 101 as of Fall 1989. Of these 168 students, 147 (88%) received an English 101 grade of "C" or better. 93 of the 168 (55%) English 101 students first enrolled in developmental English courses. Of these 93 students, 90% received an English 101 grade of "C" or better.

Table 2. Percent of Transitional ESL Students Receiving an English 101 Grade of "C" or Better.

Students In Transitional ESL Courses	Number Enrolled In English 101	Percent of Students Receiving "C" Or Better: First Enrolled Developmental English	Enrolled Directly In English 101	All ESL Students
ESL 097 Only	33	93.1%	75.0%	90.9%
ESL 099 Only	60	92.3%	82.3%	86.7%
ESL 097 and 099	75	86.8%	86.5%	86.7%
TOTAL	168	90.3%	84.0%	87.5%

COMMENTS

Taking Developmental English before English 101 Increases Performance in English 101, but Decreases Enrollment In English 102

It appears that half the students enrolled in transitional ESL courses will eventually enroll in college-level English courses. If ESL students enroll in developmental English courses prior to college-level English courses, their performance is slightly better than their peers who enrolled directly in college-level English. However, the results of this study also indicate that students who enroll in developmental English courses prior to English 101 are less likely to enroll in English 102. 14 of 93 ESL students (15%) who enrolled into developmental English and English 101 subsequently enrolled into English 102. This is a much lower rate than for students who had enrolled directly into English 101 from their ESL courses (33 of 75 students, 44%). It is possible that the ESL students who enrolled in developmental English courses have taken a longer time to progress in their English studies. A follow-up study to determine students' subsequent progress would be valuable.

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

Transitional ESL Students Who Do Not Continue Their English Studies Enroll in Other Courses at SCCC

226 of 302 transitional ESL students (75%) enrolled in subsequent developmental or college-level English courses. A question was raised about the remaining 25% of ESL students who did not enroll in subsequent English courses. It was found that only 18 transitional ESL students (6% of 302 students) left Seattle Central Community College. 17 of these students left after taking only one transitional ESL course. The remaining 59 students enrolled in non-English developmental or college-level courses at Seattle Central Community College.

Results of this study have been shared with the basic studies faculty and Division Chair, as well as with the Dean of Instruction.

STUDY 5: COMPARING STUDENTS' COLLEGE MATH PERFORMANCE WITH PLACEMENT SCORES AND DEVELOPMENTAL MATH HISTORY

Study Conducted Spring 1990

PURPOSE OF THE STUDY

Comparing Placement Test Scores and Developmental Math Course Histories with Students' Performance in College-Level Math

For several years, it has been observed that students at Seattle Central Community College, and around the nation, have a difficult time with college-level math courses. Many students appear ill-prepared for the content and pace of these courses. SCCC students wishing to enroll in the first level of college math (Math 101) must demonstrate a readiness for the course by (1) taking a computation placement test, or (2) completing developmental math courses (Math 084 and Math 085) or (3) providing evidence of completing course work equivalent to Math 085 or higher. The purpose of this study is to examine the relationships of Math 101 performance with computation placement test scores, and developmental math course history. We hope to determine how well these avenues of access to Math 101 predict performance in Math 101.

METHOD

Math 101 Students During Fall Quarter 1988

For this study, the sample included all students enrolled in Math 101 courses during Fall quarter 1988. Computation placement test scores and developmental math histories were obtained for these students, if available. Math 101 grades were obtained for all students. Comparisons were made between a student's Math 101 grade and his/her placement score, developmental math course history, and developmental math course grades.

RESULTS

Students Enroll in Recommended Math Courses

202 students enrolled in Math 101, Fall quarter 1988. 77 of the 202 students (38%) enrolled in Math 101 after completing at least one developmental math course. 67 of the students (33%) enrolled in Math 101 after taking the computation placement test, and the remaining 58 students (29%) enrolled through other means. Of the 67 students who took the placement test, 64 (96%) were recommended to Math 101.

Less Than Half of Math 101 Students Receive "C" Grade or Better

Of the 202 students enrolled in Math 101 during Fall 1988, 100 students (49.5%) received a Math 101 grade of "C" or better. If we eliminate from the sample students who withdrew from the course, or took the course as an audit, 62% of 161 students received "C" grades or better. Of the 77 students who enrolled in developmental math courses prior to Math 101, 43% received a Math 101 grade of "C" or better. Of the 67 students who took a placement test for Math 101, 58% received "C" grades or better. Of the 58 students who enrolled in Math 101 through other avenues, 48% received "C" grades or better.

Table 1. Percent of Math 101 Students Receiving "C" Grades or Better by Avenue of Access.

Avenue of Access	Count	Percent Receiving "C" or Better
Math 084 Only	10	50.0%
Math 085 Only	16	31.2%
Math 084 and Math 085	51	25.5%
Placement Test	67	58.2%
Other Avenue	58	48.3%
Totals	125	49.5%

40% of the Students Enrolled in Math 101 More than Once

Of the 202 students enrolled in Math 101, 81 repeated Math 101 at least once. 23 of these 81 (28%) eventually received a Math 101 grade of "C" or better. 50 students repeated Math 101 once, 20 students repeated Math 101 twice, and 11 students repeated more than twice.

COMMENTS

Placement Scores Best Predict Math 101 Success; Developmental Math Courses Do Not

67 students were recommended to Math 101, 39 of these students completed Math 101 with a "C" or better (58%). This "avenue of access" is the best predictor of Math 101 success than any other avenue (see Table 2). The worst predictor of the "avenues of access" is taking two developmental Math courses. 13 of the 51 students who took two developmental math courses received a "C" or better (25.5%).

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

Faculty Requests Additional Information Regarding Student Characteristics and Performance in Math Courses

The results of this study did not come as a surprise to the math faculty. The low performance of students in Math 101 is a national trend; the SCCC math faculty were already aware of their students' difficulties completing the course. The math faculty met and discussed the results of this study and asked for additional information and data to help them understand the entire situation. Their questions and the results are provided in Study 6 of this document.

STUDY 6: TRACKING STUDENT MOVEMENT FROM DEVELOPMENTAL MATH TO COLLEGE-LEVEL MATH AND INDICATORS OF SUCCESS

Study Conducted Spring 1990

PURPOSE OF THE STUDY

Looking for Characteristics Affecting Successful Completion of College-Level Math

Study 5 in this document showed that less than half the students who enrolled in Math 101 completed the course with a "C" grade or better. The study indicated that the Math 101 completion rate varied depending on the avenue of access into the course. Students who were recommended to Math 101 by their placement test scores had a much higher completion rate than students who entered by completing developmental math courses (Math 084 and Math 085). The math faculty, upon review of the results of Study 5, requested additional data on the characteristics and course taking patterns of Math 101 students. This study will provide the results of the faculty requests.

Specifically, the faculty asked the following questions:

(1) What percentage of developmental math students enroll in Math 101, and what percentage successfully complete the course?

(2) How well do students' developmental math grades correlate with their Math 101 grades?

(3) What are the educational goals of the students enrolled in developmental math courses?

(4) Will students who repeat math courses eventually receive a passing grade?

(5) Will a student's quarterly course load affect a student's math grade?

The following results address these faculty questions and were presented to the faculty for further discussion and action.

METHOD

Two Sample Populations Selected

For this study, two samples of math students were selected. For questions 1 and 2 above, the sample included all students enrolled in Math 084 and Math 085 during AY 1988-1989. This particular academic year was selected because it was the first quarter that SCCC began to use decimal grades. Decimal grades were needed to perform certain statistical analysis requested by the faculty.

For questions 3, 4, and 5 above, the sample included all students enrolled in Math 084, Math 085 and Math 101 from Summer quarter 1988 to Winter quarter 1990.

Several students repeated math courses; the most recent grade received for a math course is considered in the sample data. The term "successful completion" refers to students who received at least a "C" grade ($\geq$1.5) in a respective math course.

RESULTS

A Greater Proportion of Students Who Enroll in Both Developmental Math Courses Continue on to College-Level Math

644 students enrolled in Math 084 and/or Math 085 during AY 1988-1989. 314 students took Math 084 only, 98 students took Math 085 only and 232 students took both courses. 64% of the students enrolled in both developmental math courses also enrolled in Math 101 as of Winter quarter 1990. This rate is higher than the 38% of students enrolled only in Math 085, or the 7% who enrolled only in Math 084 (Table 1). In regard to performance in Math 101, there were no large differences between students with different developmental math histories. Students who took only Math 085 successfully completed Math 101 at a higher rate (68%), than students who took both courses (60%), or students who took only Math 084 (50%).

Table 1. Percent of Students Receiving "C" Grades or Better in Math 101.

Developmental Math History	AY 1988-89 Enrollment	Percent Enrolled Math 101	Percent Receiving "C" or Better
Math 084 Only	314	7.0%	50.0%
Math 085 Only	98	37.8%	67.6%
Math 084 and Math 085	232	64.2%	59.7%
Totals	644	32.3%	60.1%

Positive Correlations Between Developmental Math Grades and Math 101 Grades

The comparison of developmental math grades and Math 101 grades shows that the better a student performs in developmental Math, the better s/he performs in Math 101. Table 2 shows the percentage of students who received a "C" grade or better for each sub-group of developmental math students (grouped by developmental math grade). For example, 56% of the students who enrolled only in Math 084, and whose Math 084 grade was greater than or equal to 2.0, also received a Math 101 grade of "C" or better. Similarly, 80.8% of the students who only enrolled in Math 085, and whose Math 085 grade was greater than or equal to 2.0, also received a Math 101 grade of "C" or better. For all students, as their developmental math grades increased, so did the percent who successfully completed Math 101.

Table 2. Percent of Students Receiving "C" Grades or Better in Math 101 Compared with Developmental Math Course Grades.

		Percent of Math 101 Grades of "C" or Better			
		Developmental Math Grade Greater Than or Equal To			All
Developmental Math Course	AY 1988-89 Enrollment	2.0	2.5	3.0	Grades
Math 084 Only	314	56.3%	61.5%	80.8%	50.0%
Math 085 Only	98	80.8%	81.8%	84.2%	67.6%
Math 084 and Math 085	232	67.8%	76.0%	81.3%	59.7%

The Percent of Students Intending to Transfer to a Four-Year Institution Increases with Each Level of Math

For all math courses, the percent of students whose educational goal is to transfer to a four-year post-secondary educational institution is very high. For example, 73% of the students in Math 084 courses (from Summer quarter 1988 to Winter quarter 1990) had an educational goal of transferring to a four-year school (as determined by Student Intent Codes). The remaining 27% are divided among eight other educational goals. The percentage of students intending to transfer increases with each higher level of math. Students of all educational goals successfully complete Math 101 at a similar rate.

Table 3. Percent of Students in Math Courses Whose Academic Goal is Transfer to a Four-Year Institution

Math Course	Enrollment Summer 1988 to Winter 1990	Percent Intending to Transfer
Math 084 Only	1902	72.7%
Math 085	1207	80.3%
Math 101	782	88.1%

Students' Chances of Successfully Completing Math 101 Do Not Increase by Repeating Course

Students successfully complete developmental Math 085 or Math 101 at the same rate, regardless of the number of times students re-enroll in a particular math course. Students have less chance of successfully completing Math 084 if they re-enroll in the course.

Table 4. Percent of Students Successfully Completing a Math Course with a "C" or Better by Frequency of Enrollment in the Course

Frequency Taking the Math Course	Percent of Students Successfully Completing the Course		
	Math 084	Math 085	Math 101
One Time	58.4%	64.4%	64.3%
Two Times	34.1%	62.7%	54.0%
Three Times	31.3%	68.4%	62.5%

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Quarterly Credits Registered Does Not Relate to Math Grades

The results in Table 5 indicate that there is no relationship between a student's quarterly credit load, and that student's math grade. No matter how many total credits students register for, the same percent of students will pass the mass class they enrolled in.

Table 5. Percent of Students Successfully Completing a Math Course with a "C" or Better by Quarterly Credits Registered and Quarterly Credits Earned.

	Percent of Students Successfully Completing the Course		
	Math 084	Math 085	Math 101
Quarterly Credits Registered			
Five	55.4%	60.9%	53.1%
Ten	50.6%	57.7%	47.7%
Fifteen	54.7%	58.3%	51.2%

COMMENTS

The results of the questions asked by the math faculty indicate the following:

* A student is more likely to move on to Math 101 after taking both quarters of developmental math.

* The success of the student in Math 101 is related to the number of quarterly credits earned, grade(s) in developmental math.

* At least 75% of math students plan to transfer to four-year institutions.

* The success of the student in Math 101 is not related to academic goals, course repetition or quarterly credit load.

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

Math Faculty Have Revised Curriculum and Teaching Strategies for Many of Their Courses

Partly in response to the results of this study, the math faculty have made significant revisions to their curriculum and the teaching strategies used in the classroom. The faculty have received grant funds from the National Science Foundation and also from the Title III Learning Access Project to support these improvements to the quality of math education at SCCC.

STUDY 7: SURVEY OF FACULTY ABOUT STUDENT WRITING

Study Conducted Winter and Spring 1991

PURPOSE OF THE STUDY

Faculty Perception of Student Writing Skills

Can Washington State college students write effectively? The State Board for Community and Technical Colleges (SBCTC) was interested in the nature and quality of student writing, and asked faculty members (not only English faculty) to respond to a survey. Faculty members from Seattle Central Community College responded to the survey. The results are contained in this report.

METHOD

The State Board for Community and Technical Colleges developed a questionnaire which asked faculty about student writing skills. The questionnaire also asked faculty to report how writing assignments were incorporated into their curricula and whether a student's final grade was partly determined by the student's writing skills. The survey particularly asked non-writing instructors to respond. The questionnaire was delivered to all full-time and part-time instructors. The results are listed below.

RESULTS

48 SCCC faculty members responded to the survey, 37 (77%) of whom were from non-writing disciplines. A large number of instructors (71%) taught 100-level courses.

20 Different Writing Assignment Formats Used

Faculty reported that they used at least 20 different kinds of writing assignments. The most frequently used are essay assignments, summaries/paraphrase, self/peer evaluation and creative responses.

Nearly all faculty provide oral instruction for writing assignments (92%) and written instruction (90%). Nearly 2/3 of the faculty offer example papers (67%) or allow revisions (65%).

When asked what percentage of a student's final grade was based on writing skills, 42% of the faculty responded that 0% to 19% of the final grade was based on writing skills. on writing skills.

Most Important Writing Components Are Content, Clarity of Expression, Organization

Faculty reported that the most important areas in evaluating writing are, in order of importance (1) content of the paper, (2) clarity of expression, and (3) organization.

72% of the faculty "strongly agree" that (1) writing is a useful tool for the courses they teach and (2) writing is important to students graduating in the discipline.

Grammar, Spelling, and Sentence Structure Identified as Greatest Weaknesses

Faculty most frequently cited creativity (23% of the faculty) as a writing strength of SCCC students. Writing weaknesses were identified as grammar (52% of the faculty), spelling (40%), and sentence structure (25%).

The most prevalent suggestions from faculty for the improvement of student writing skills were: (1) a campus-wide criteria for inclusion and assessment of student writing assignments (21% of the faculty); (2) more writing expected from students (8%); and (3) more time spent by students in developmental/ESL courses (8%).

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

The above results were reported in the campus-wide weekly newsletter. The full report was shared with the Student Outcomes Task Force, many of whom are writing instructors. Additional copies of the results were provided to faculty upon request.

STUDY 8: VOCATIONAL STUDENT FOLLOW-UP SURVEY: MEASURING STUDENT OUTCOMES ELEMENTS AT THE WORKPLACE

Study Conducted Summer 1990 to Spring 1991

PURPOSE OF THE STUDY

Annual SCCC Vocational Follow-up Surveys (Up to 1990)

For several years up until 1990, former SCCC vocational students have been surveyed to determine their employment status upon leaving their vocational program. Surveys were mailed to students, and follow-up phone calls were made to contact as many students as feasible. Students were asked if they were currently working, in the military, attending school, or looking for employment. Additionally they were asked, if working, whether or not their employment was related to their field of study while at SCCC. The data have been maintained in spreadsheets, and shared with departments and divisions.

State Survey of Former Vocational Students and Employers - 1990

Beginning in 1990, the State Board for Community and Technical Colleges (then the State Board for Community College Education), assumed responsibility for tracking professional/technical students from college to the work force. The SBCTC contracts with State Employment Security to match Student ID numbers with Social Security numbers to determine the employment status of former students. During 1990, the state also surveyed employers of former community college students to determine their satisfaction with the employee's skills.

Former SCCC Vocational Student Survey, Supplemental - 1990

When the SBCTC assumed responsibility for tracking former professional/technical students, SCCC used this opportunity to conduct an in-depth survey of former students about their education and employment experiences. The survey asked students to respond to questions in six categories related to their experiences at SCCC:

(1) Reasons for attending SCCC
(2) Employment history since leaving SCCC
(3) Employment related to SCCC training
(4) Satisfaction/evaluation of SCCC experience
(5) Future career/education goals
(6) Demographic information

Some questions were designed to obtain information about the quality of employment: levels of responsibility, length of stay, upward mobility, length of job search, and salary. Other questions asked former students to reflect upon their educational and work experiences as they directly relate to sixteen selected outcomes from the SCCC Model of Student Learning.

METHOD

Questionnaires were mailed to 540 former SCCC students who had either (1) graduated with an AAS degree from SCCC during AY 1988-1989, or (2) had earned at least 45 credits at SCCC and whose final quarter at SCCC occurred during AY 1988-1989.

RESULTS

Students are Employed in Fields Related to Their Studies

228 completed surveys were returned, a response rate of 42%. Respondents represented students from 27 SCCC professional/technical programs. 175 respondents (75% of all respondents) indicated that they attended SCCC to "prepare for a future job." Of those 175, 165 (83%) indicated that they accomplished this goal. 85% of 148 respondents indicated that their first job after leaving SCCC was directly related to their studies. This increased to 87% of 129 respondents who have a third job since leaving SCCC. The frequencies and percentages of several questions are in Table 1.

Table 1. Responses to Selected Items from the SCCC Survey of Former Vocational Students.

Questionnaire Item	Number of Responses	Percent Of Valid Respondents
Planned to obtain a SCCC degree	178	75%
Wanted to prepare for future job	172	75%
-Accomplished this goal	165	83%
First job was beginning/entry level	102	65%
Current job is beginning/entry level	70	70%
First job directly related to training	148	85%
Current job directly related to training	129	87%
SCCC training required for first job	101	65%
SCCC training required for current job	95	72%
Current job more complex/responsibility	109	81%
Some SCCC training used regularly on the job	154	92%
Some SCCC training irrelevant to job	64	40%
Adequately prepared for licensing/certification	63	84%
Starting again, would still choose SCCC	184	84%

The frequencies and responses to all questions were shared with each professional/technical program The results were also presented and discussed at a forum for professional/technical instructors during Spring 1991.

"Working Collaboratively With Others" Most Frequently Cited as Valuable on the Job

One of the objectives of the SCCC survey was to discover which of the SCCC learning outcomes former students saw as valuable at the workplace. Another objective of the survey was to discover which learning outcomes students felt they improved in while at SCCC. The learning outcomes most frequently cited as being of value are:

(1) Work collaboratively with others (66%)
(2) Apply learning to new situations (63%)
(3) Adjust to new situations (62%)
(4) Define and solve problems (61%)
(5) Think and learn from experiences (61%)

"Taking Pleasure in Learning" Most Frequently Cited Value-Added Learning Outcome While a Student at SCCC

Former students felt their SCCC education added "very much" to the following learning outcomes:

(1) Take pleasure in learning (55%)
(2) Think about and learn from experiences (51%)
(3) Apply learning to new situations (51%)

COMMENTS

Discrepancy Between What Students Improve In vs. What Students Find Valuable on the Job

If one compares student perceptions of what is of value at the workplace to perceptions of what they improved in most while at SCCC, some discrepancies become apparent. Students are more likely to indicate a particular learning outcome is of value on the job than they are to indicate that they improved on that particular outcome.

The learning outcomes with the greatest discrepancies in this regard are:

(1) Ability to work collaboratively with others (33% difference in responses)
(2) Ability to know how and where to get help (30% difference)
(3) Ability to speak effectively (25% difference)
(4) Ability to use mathematics in everyday life (20% difference)

Professional/technical faculty may want to assess the importance of addressing the above learning outcomes in their curricula.

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

Faculty Identify Learning Outcomes "Essential" to Their Programs

The results of our survey and the state survey of employers were presented to professional/technical faculty at a forum during Spring 1991. At this forum, 41 faculty, staff and administrators representing 16 departments discussed the value and use of survey data such as that provided in this study. Faculty also discussed assessment as a process for determining student learning. To initiate the discussion, faculty members were asked to determine the importance of each SCCC learning outcome to their program on a scale of 1 to 5. The outcomes receiving the most "5" scores ("An Essential Part of My Program") from the faculty are listed in
Table 2.

Table 2. Percent of Professional/Technical Faculty Indicating Selected Learning Outcomes as "Essential" to Their Programs.

SCCC Learning Outcome	Percent of Faculty Responding "Essential"
1. Ability to work and solve problems	100%
2. Ability to work collaboratively with others	96%
3. Ability to know how and where to get help	92%
4. Ability to give and take criticism	85%
5. Ability to adjust to new situations	85%
6. Ability to think about and learn from experiences	85%
7. Ability to apply learning to new situations	85%
8. Ability to know/appreciate my strengths	81%

Faculty Responses Compared with Employer Responses

Six of the SCCC learning outcomes had similar counterparts in the state survey of employers. Faculty and employer responses to these six items were compared and discussed at the forum. While faculty responded to the importance of the outcome in their program, employers responded to their satisfaction with former students' skills in the outcome area.

Table 3. Comparison of Faculty Responses and Employer Responses to Six SCCC Learning Outcomes Items

Similar State and SCCC Outcomes	Percent of Faculty Responding "Essential"	Percent of Employers Responding "Very Satisfied"
1. Ability to define and solve problems	100%	70%
2. Ability to work collaboratively with others	96%	85%
3. Ability to adjust to new situations	85%	76%
4. Ability to use mathematics in everyday life	65%	72%
5. Ability to speak effectively	62%	88%
6. Ability to write effectively	50%	70%

The comparison of employer and faculty responses might suggest that as faculty feel an outcome is more important to a program, the employer also becomes more satisfied with the students' skills in this outcome area.

Data collected from the SCCC supplemental survey were shared with faculty on a program-by-program basis. It was suggested to the faculty that the dialogues initiated during the forum session continue at the program level amongst faculty peers.

REPORT 1: CURRICULUM FOR CULTURAL PLURALISM

Activities Conducted Fall 1989 to Present

CULTURAL PLURALISM GRANTS PROVIDED TO FACULTY TEAMS

The Curriculum for Cultural Pluralism Project (CCP) was formed by the Deans of Instruction and Student Services and the Title III Director to specifically address "Multi-Cultural Literacy" and "Knowledge of Diversity and Interdependence," two outcomes from the SCCC Model of Student Learning. Funds have been provided to support faculty release time or stipends for curriculum revision work. The overall goal of the project is to infuse the curricula with cultural pluralism The project is co-sponsored by the Minority Incentive Program and Title III Student and Institutional Outcomes (SIO).

Faculty teams have revised the following curricula as CCP grant projects:

During Academic Year 1989-90:
(1) English 095/English 096/Anthropology 102 Link
(2) English 101/English 102 transition
(3) Seminar for math instructors using computers in classroom

During Academic Year 1990-91:
(1) CSP 250 - Speaking For Ourselves
(2) English 102/Library 101 Link
(3) Basic Studies Curriculum - ABE I, IIA, IIB, III
Math I, II, IIIA, IIIB
GED/General Studies Lab
(4) Economics 100, 201, 202

During Academic Year 1991-92:
(1) Sociology 120 / Communication 214 Link
(2) ESL beginning level for Immigrant/Refugee Students
(3) Video Technology Program: English 102, English 150 CSP 200 - The Televised Mind, Drama 121 Link
(4) History 111, History 112
(5) English 080 - English Skills Lab
(6) TCS 150 - College Prep for Non-Native Speakers

Proposed for Academic Year 1992-93:
(1) History I (Middle College)
(2) Psychology 206
(3) Economics 201
(4) English 105/Sociology 110/Math 110 Link
(5) Apparel Design 140, 141, 142

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

Measurements of Pluralism Learning Outcomes Are Elusive

Each of the grant projects identified specific learning outcomes for their projects as they related to the SCCC Model of Student Learning. The grant guidelines for the first year projects stipulated that faculty groups measure the effect of the revised curriculum on the students. The stated objectives for most projects included (1) increased knowledge of other cultures and (2) changes in attitude and behavior towards people of different cultures. During interviews with the faculty groups, it was discovered that the faculty members had a difficult time devising strategies that would allow them to measure the attitudinal and behavioral outcomes. The grant guidelines were revised for subsequent applicants, stipulating that the faculty members must meet with the Planning and Research Office staff during the first phase of the curriculum revision to develop appropriate qualitative or quantitative measurement strategies. The faculty groups will again meet with the Planning and Research Office to "debrief" on their measurement activities.

Measuring Cultural Pluralism

Measurement of the effect of curriculum revisions on the students will naturally depend on the learning objectives of each grant project. Faculty groups have had to frequently review with their learning objectives as they decide on the measurements they wish to use. Below is a partial listing of the measurement strategies that have been attempted:

Pre-test/Post-test Activities

(1) Knowledge - One activity attempted to measure the increase of the students' awareness and knowledge of accomplished people of color within the history of the United States.

(2) Situation Response - Another activity suggested, but not yet implemented, would have students respond in writing to a controversial situation involving moral, ethical and cultural values. The papers would be collected at the beginning of the quarter. Another controversial situation would be presented at the end of the quarter. The first and second papers would be compared for each student. Instructors would look for evidence that a student had an improved appreciation for cultural or ethical differences among people.

Behavioral Changes In Students

It is the intent of many of the grant projects that students embrace and incorporate a pluralistic attitude and philosophy. Therefore, changes in students' behaviors might be indicators of the attainment of a new perspective toward people of different cultures.

(1) Seating Arrangements - It was suggested that seating arrangements could be monitored from the first day of class to see if cultural barriers exist and breakdown during the quarter.

(2) Small Group Attributes - Several instructors use small groups in their regular lesson plans. The characteristics of these small groups could be monitored for evidence of behavioral changes.

Student Self-Assessment

Several of the faculty groups are asking students to examine their own experiences and to determine if they have achieved any growth or new understanding about cultures.

Gathering Evidence of Multi-Cultural Infusion

It is the overall intention of the cultural pluralism project that faculty members who have received grants for curriculum revision will continue to apply pluralistic approaches in their other courses. It is also intended that revised curricula will be adopted and used by instructors not originally involved in curriculum revision.

Measurable evidence of changes in student behavior and attitudes has been elusive, however other indicators might suggest an infusion of cultural pluralism into the SCCC curriculum. One indicator might be that faculty groups are now providing in-service trainings, workshops and seminars for their peers and colleagues at SCCC. SCCC faculty are also receiving regional and national recognition for their cultural pluralism activities. Several of our faculty have been invited to participate as guest speakers at conferences around the United States. Also, SCCC has received out-of-state visitors who wished to observe SCCC activities first-hand.

As elusive as it might be to measure, cultural pluralism activities are occurring on the campus. In the classroom faculty are addressing the issues of empowerment, respect, and finding one' own voice.

STUDY 9: LOOKING FOR DIFFERENCES IN THE LEARNING OF COORDINATED STUDIES STUDENTS AND STUDENTS IN DISCRETE COURSES

Study Conducted Winter 1991 to Present

PURPOSE OF THE STUDY

Examining the Learning in Traditional Vs. Non-Traditional Classroom Education

Coordinated Studies programs offer an alternative to the traditional course-by-course approach to learning. These programs, based on specific themes, synthesize knowledge and ideas across different disciplines. Instead of teaching three or more separate courses, a team of instructors presents an integrated program together. Seminars play a crucial role in the learning process in which students learn to analyze and critique arguments, cooperate in group discussion, read critically and debate logically. It is of interest to the faculty at SCCC to measure the learning outcomes of CSP and non-CSP students to determine if there are, in fact, differences in the students' learning.

METHOD

Cornell Critical Thinking Test and the SCCC Student Learning Self-Evaluation

244 students enrolled in CSP courses at SCCC during Winter 1991. A "control group" of 244 additional students were selected from students enrolled in discrete courses Winter 1992, who had not previously enrolled in a CSP course. CSP and non-CSP students were matched on gender, age, ethnicity, number of quarters at SCCC, grade point average, educational goals, college-level credits earned, previous college experience, placement test scores, math and English credits, and whether they were day or evening students. Of these 488 students, 74 volunteered to take the Cornell Critical Thinking Test and the SCCC Student Learning Self-Evaluation. The critical thinking test is a standardized test in which students read described situations and decide the best answers to a series of questions. The self-evaluation is a checklist of desired learning outcomes from the SCCC Model of Student Learning (see Appendix C, Version 4A). Students respond to the self-evaluation by indicating which of the learning outcomes they feel they have discussed in class and in which outcomes they feel they have improved their skills or knowledge.

RESULTS

CSP Students Select Slightly More "Correct" Answers than Non-CSP Students on the Cornell Critical Thinking Test

29 CSP students and 45 non-CSP students answered the 52 questions from the Cornell Critical Thinking Test. CSP students averaged 2.95 more "correct" answers (as reported in the test manual) than the non-CSP students. A T-test of group means produced a two-tail probability of 0.04, indicating that the difference in test score averages is real. CSP students had a 50th percentile raw score of 30 "correct" answers, and non-CSP students had a 50th percentile score of 27. These scores are similar to the scores of their peers at four-year colleges, which ranged from 27 to 32 "correct" answers for student groups at four other colleges.

Table 1. Cornell Critical Thinking Test Results.

	Coordinated Studies Students	Non-Coordinated Studies Students	Other Four-Year College Students			
			A	B	C	D
Number of Students	29	45	128	52	82	100
Median Score	30	27	30	30	30	27
Minimum Score	22	14	19	13	18	13
Maximum Score	45	41	44	39	38	39

CSP and Non-CSP Students Answer Similarly to Critical Thinking Test Items

Chi-square and Pearson R correlation statistics were calculated for each question. Only eight of the 52 questions indicated a statistically significant difference between CSP and non-CSP student responses. Three of the eight questions occur in the "Semantics" section of the test, the others are scattered among the other six test sections.

CSP and Non-CSP Students Respond Differently to Items on the Student Learning Self-Evaluation Survey

Students were asked to respond to two questions:

> (1) "Which of the following Learning Outcomes are you absolutely sure you DISCUSSED OR COVERED in your courses this quarter?"
>
> (2) "Which of the following Learning Outcomes are you absolutely sure you IMPROVED YOUR SKILL OR UNDERSTANDING this quarter?"

CSP and non-CSP students answered the questions in markedly different ways. Of the 26 learning outcomes listed on the survey, the two students groups showed statistically different responses for 18 of the 24 items for the first question, and 16 of 26 items for the second question. CSP students responded at much higher rates in both cases. For the first question, an average of 61% of the CSP students responded positively to each learning outcome, compared with 29% of non-CSP students. For the second question, an average of 63% of the CSP students responded positively to each learning outcome compared with 43% of the non-CSP students.

COMMENTS

CSP Students Appear More Aware of the Learning Occurring in the Classroom

The Student Outcomes Task Force was concerned about the validity of a standardized critical thinking test. After much discussion, members agreed to administer the Cornell Critical Thinking Test for the purpose of determining whether the two groups of students would respond differently to the instrument. The same reasoning supported the use of the Student Learning Self-Evaluation. In short, the task force members were not interested in "right" or "wrong" answers, but whether students are learning differently in different educational environments.

From the critical thinking test, we learned that CSP and non-CSP students do not appear to differ in their critical thinking test responses. And we also learned that SCCC students do not appear to differ in their responses compared to their peers at four-year colleges. These findings are supported by results from the Student Learning Self-Evaluation. 100% of the CSP and non-CSP students thought they had improved their critical thinking skills. However, in terms of whether they discussed or covered critical thinking in their courses, 73% of the CSP students said "yes" compared to 43% of the non-CSP students. This indicates that CSP students are perhaps more aware of what they are learning in the classroom. This idea appears to be supported by the results that, on the average, 33% more CSP students than non-CSP students responded that they were sure they covered or discussed the 24 learning outcomes.

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

The results of the two instruments were shared with the Student Outcomes Task Force. There was discussion among the faculty members and administrators as to the value of "awareness" of what one is learning. If indeed students are developing equal abilities and skills in both types of educational environments, how does the increased awareness of one's learning benefit the student?

Longitudinal Study of CSP and Non-CSP Students

The two student groups will be followed in a longitudinal study which will examine student course-taking patterns, persistence and educational outcome.

Collaboration of SCCC and National Center on Teaching, Learning and Assessment

During the Fall of 1991, approximately 500 SCCC CSP and non-CSP students were involved with a study conducted by SCCC and the National Center on Teaching, Learning and Assessment. The purpose of the study is to determine what differences in learning and perception of learning occurs between students in discrete courses and students in "collaborative learning communities" such as CSP courses. 20 student attributes and characteristics will be compared with survey and interview responses. Students were surveyed twice and interviewed during Fall 1991. Additional surveys and interviews were conducted in Spring 1992. The results of the report should be ready by Fall 1992.

STUDY 10: THE STUDENT LEARNING SELF-EVALUATION SURVEYS

Studies Conducted Spring 1990 to Present

HISTORY OF THE STUDENT LEARNING SURVEY QUESTIONNAIRE

The Student Learning Self-Evaluation is a checklist of dimensions and outcomes from the SCCC Model of Student Learning (see the "Model of Student Learning" section of this document). The checklist items and the questions asked have been altered and modified over the past year or so, but the intent of the questionnaire remains the same: to discover which of the outcomes from the Model the students and faculty believe the students are learning in their particular courses.

Version 1 - A Checklist of 57 Items from the SCCC Model of Student Learning - Spring 1990

The first survey instrument (see Appendix C) contained each of the 57 items on the SCCC of Student Learning and asked but one question: "At the end of the quarter, as a result of what you are learning in this class, in which of the following areas do you feel you will have improved?" Students were asked to check the item if they wished to respond positively. The results were shared with faculty at a college-wide forum.

Version 2 - A More Narrative Instrument for Developmental English Students - Summer 1990

A task force, sponsored by Title III funding, worked through the Summer of 1990 to create a more flexible and understandable instrument for developmental English students. This instrument, now 78 items long, including narrative responses to some questions, was piloted in developmental courses during the Summer quarter. The students collectively rejected the instrument as too long and too redundant.

Version 3 - Instrument Revision Piloted with "Ways of Knowing" Students - Fall 1991

Version 2 was shortened to 60 items, and was taken and reviewed by the students in the CSP 200 "Ways of Knowing" class. The instrument was rejected again for its length and repetitiveness.

Versions 4A, 4B, 4C - Degree, Basic Studies Students, Faculty - Winter, Spring, Summer 1991

Faculty attending a Winter 1991 workshop discussed the history and future of the survey instrument. A third checklist of 27 items was developed. Three versions of the checklist were administered to (1) professional/technical and academic transfer students and instructors, (2) basic studies students and instructors, and (3) instructors only. These three instruments differ in the questions asked; the items remain the same. Results of these surveys can be found later in this report. The instrument 4A was used in Study 9 and is included within Appendix C.

Version 5 - Final SIO Task Force Revised Checklist-Winter 1992

The survey instrument was again revised Fall 1992 (see Version 5, Appendix C). The revision reflects the responses and feedback from the students and faculty involved with the surveys this past year. The survey was distributed to students and faculty Winter 1992. The results were used by the task force (see page MO-6) to develop a revised list of Student Learning Outcomes to be presented to the campus.

Version 1 - Spring 1990: Student and Faculty Perceptions of Student Learning

PURPOSE OF THE STUDY

Are Instructors' Perceptions of Learning Similar to Their Students' Perceptions?

The Student Outcomes (SIO) Task Force developed a " of Student Learning" which identified 57 learning outcomes, divided into 11 learning dimensions. With the learning outcomes identified, the task force wished to compile information and assessment measures regarding the learning outcomes. One such measure would be to ask students and faculty to identify which learning outcomes they perceive are being learned in their courses.

METHOD

A random sample of academic transfer, professional/technical, coordinated studies, and basic studies courses was obtained for Spring quarter 1990. Task force members administered the survey within each course. Students and instructors were asked to "check" the appropriate learning outcomes from the of Student Learning in response to the following questions:

> For Instructors: "At the end of the quarter, as a result of what your students are learning in this class, in which of the following areas do you feel the students will have improved?"
>
> For Students: "At the end of the quarter, as a result of what you are learning in this class, in which of the following areas do you feel you will have improved?"

RESULTS

Professional/Technical Students and Instructors More Aligned in Their Perceptions of Learning in the Classroom

The survey instrument was administered in 36 courses, to 40 faculty and 704 students. The average number of positive responses to each learning outcome item is listed below in Table 1.

Table 1. Positive Responses to Learning Outcomes Items by Students and Instructors.

SCCC Program	Number of Students	Average Percent Responding	Number of Instructors	Average Percent Responding	Difference In Responses
Academic Transfer	371	41.1%	17	62.7%	21.6%
(Coordinated Studies)	(118)	(64.4%)	(12)	(72.7%)	(8.2%)
Professional/Technical	220	50.1%	16	62.2%	12.1%
Basic Studies	113	47.0%	7	60.9%	13.9%

An average of 50% of the professional/technical students responded positively to each of the learning outcomes on the survey checklist. This compares with 62% of the professional/technical instructors, for an average difference of 12% between student and instructor responses. When compared to Academic Transfer and Basic Studies student/instructor responses, This was the lowest difference between student and instructor response rates.

Factor Groupings of Student Responses

A factor analysis of the student responses created five factor groupings. These factor groupings were labeled:

"Social"
Able to work in groups
Learning from experience
Learning from mistakes
Self-confidence
Active participation and engagement

"Humanities"
English reading/writing
Knowledge of ideas and experiences shaping human history
Ethics and values
Using cross-cultural perspectives
Able to recognize and critique ethical issues

"Cognitive"
Defining problems
Identifying relationships
Projecting consequences of actions
Reasoning, analysis, logic
Decision making, problem solving
Classifying, discriminating, ordering
Conceptualizing, abstracting
Combining theory and practice
Questioning

"Personal"
Understanding consequences of actions
Physical fitness and wellness
Managing stress and change
Able to effect change
Managing conflict

COMMENTS

CSP Students and Instructors Perceive Learning Similarly, Other Academic Transfer Students and Instructors Do Not

During conversations with faculty regarding assessment activities, the Professional/technical faculty have repeatedly stated that they have been doing this for years. The responses of the students appear to support this perspective. The professional/technical faculty and students see nearly eye-to-eye on what learning experiences they think are occurring in their programs. The students and faculty in the academic transfer courses are not so aligned in their perception of their learning. The exception to this are the CSP courses, where the students' and instructors' responses are very nearly alike. What might explain their differences? One possibility is that non-CSP students were asked to examine only one course in their responses, as opposed to the CSP students considering their entire course load. However, the faculty were also instructed to consider the same course or courses as the students, so the difference in perception of learning may be real. Another possible explanation is that the "culture" of CSP promotes student self-reflection and student-faculty dialogues about the learning that is occurring (see earlier description of CSP courses on page CT-1).

IMPLICATIONS AND FOLLOW-UP ACTIVITIES

Campus-wide Forum Initiates Discussion of Learning Outcomes

The SIO Task Force had two intentions for this survey. One was to begin to obtain a map of where learning outcomes were occurring on the campus. The other was to provide a feedback mechanism for individual instructors to use as an assessment of learning in their courses. The aggregate results of the survey were presented at a campus-wide forum Spring quarter 1990. Individual instructors also received the results for their respective course. During the forum, faculty were encouraged to consider the implications that the survey results might have for their individual course curricula as well as the curriculum of their departments and divisions.

Version 4 - Spring 1991: Three Versions of the Student Learning Self-Evaluation Administered, Factor Groupings Used to Guide the Revision of the SCCC of Student Learning

In response to student comments and critique, the 57 original learning outcomes were consolidated to 25 learning outcomes within the original 11 learning dimensions (see Version 4A, Appendix C).

At the end of Spring quarter 1991, three versions of the SCCC Student Learning Self-Evaluation checklist were administered to students and faculty. The learning outcome items were the same for all three versions, however, the questions differed between instruments.

Version 4A) Survey of 37 Professional/Technical and Academic Transfer Courses (294 Students)

Questions Asked:

(1) "Yes, I did DISCUSS OR COVER this Learning Outcome in my course."
(2) "Yes, I did IMPROVE MY SKILLS or understanding of the Learning Outcome."

Version 4B) Survey of four Basic Studies Courses (62 Students)
The instrument was modified for use with ESL students.

Questions asked:

(1) "Yes, we TALKED about this Learning Outcome in class."
(2) "Yes, we HAD AN ASSIGNMENT about this Learning Outcome."
(3) "Yes, I IMPROVED MY SKILL or understanding of this Learning Outcome."

Version 4C) Survey of 72 Instructors Considering One Course Each (72 Courses)

Questions asked:

(1) "Yes, I ACTIVELY PURSUED this Learning Outcome in my teaching."
(2) "Yes, WE TALKED about this Learning Outcome in my class."
(3) "Yes, I GAVE AN ASSIGNMENT related to the Learning Outcome."
(4) "Yes, I EVALUATED STUDENTS regarding this Learning Outcome."
(5) "Mark your FIVE MOST IMPORTANT Learning Outcomes."

Factor Analysis Groupings Reviewed by the SIO Task Force - Fall 1991

The survey results were again shared with individual faculty for their own assessment purposes. Factor groupings were obtained to determine if a consistent grouping of the 25 items might be evident. The SIO Task Force decided that, based on the number of responses, the survey of the 294 professional/technical students and academic transfer students was the most valid of the factor groupings. The factor groupings for the question "Yes, I did improve my skills or understanding of the Learning Outcome" are listed below.

Responsible Action
Responsible Action
Self-Esteem
Social Interaction
Self-Reflection
Social Responsibility

Cultural Expression
Oral Communication: Speaking and Listening
Ethics and Values
Aesthetic and Creative Expression
Ideas and Experiences Shaping Human History

Basic Skills
English Reading
English Writing
Computer Use

Social Awareness
Environmental Issues
Multi-cultural Issues
Economic Issues
Scientific Issues

Mastery of Material
Mastery of Vocational Program
Able to Market Vocational Skills

Critical Thinking
Numerical Use
Information Seeking
Critical Thinking

The Task Force members concluded that one more survey of students and faculty was necessary to confirm the reliability of the factor groupings. An additional survey was scheduled for Winter 1992.

VERSION 5 - WINTER 1992 SURVEY AND INSTITUTIONAL INTEGRATION

Third Factor Analysis Shows Groupings Similar to Previous Surveys

The Student Outcomes Task Force hopes to produce a revised and condensed of learning which will be supported and accepted by the campus community. A final Student Learning Self-Evaluation survey was administered Winter 1992, to confirm the reliability of the factor groupings from the Spring 1991 survey. 700 students and faculty in 39 academic transfer and professional/technical courses were surveyed. The factor groupings for the question "Yes, I did improve my skill or understanding (of this outcome)" are listed below.

Factor 1
Critical Thinking
Life Long Learning
Responsible Action
Self-Esteem
Self-Reflection
Social Interaction
Social Responsibility

Factor 2
Ethics and Values
Ideas and Experiences Shaping Human History
Multicultural Issues

Factor 3
Computer Use
English Reading
English Writing

Factor 4
Economic Issues
Environmental Issues
Media Issues
Scientific Issues

Factor 5
Ability to Market One's Skills
Aesthetic and Creative Expression
Numerical Use

The results of the Winter 1992 survey were presented at a campus-wide forum held Spring 1992. Faculty, students and administrators attended subsequent SIO Task Force meetings that focussed on the survey results and their implications for a revised of Student Learning. Based upon these discussions, the following revision of the list of student learning outcomes was developed.

SOCIALIZATION	
Collaboration	For example: able to work cooperatively in a group setting; working cooperatively amid differences.
Life-Long Learning	For example: finding pleasure in learning; developing curiosity about the world; learning about oneself as a learner.
Responsible Action	For example: recognize, articulate and act on one's convictions, goals, or values; recognize and critique ethical issues; understand and assume the consequences of one's actions; preserve one's individuality while working for a common good.
Self-Esteem	For example: recognize one's strengths and limitations; maintain physical fitness or wellness; enjoy self-confidence; be willing to take risks to achieve goals.
Self-Reflection	For example: learning from experience; understanding personal motivations; reflecting on one's thinking processes.
Social Interaction	For example: flexibility; able to effect change in one's environment; respecting the life experiences and development of others; able to give and receive criticism; able to manage conflict.
Social Responsibility	For example: awareness of the connection between oneself and the world; using cross-cultural perspectives; taking responsibility for the next generation.

ISSUES AND VALUES
Economic Issues
Environmental Issues
Ethics and Values
Knowledge of Social Systems For example: ability to access support systems; ability to function within bureaucracies.
Ideas and Experiences Shaping Human History
Media Issues
Multicultural Issues
Scientific Issues

BASIC SKILLS
Computer Use
English Reading
English Writing
Numerical Use
Oral Communication

CREATIVE EXPRESSION
Art
Dance
Drama
Literature
Music

CRITICAL THINKING
Information Seeking
Identifying Relationships
Classifying, Discriminating, Ordering

These revised classifications of learning outcomes will be discussed with the entire SCCC community in Fall 1992, with the intent of adopting them as the "official" listing of the college's student learning outcomes.

REPORT 2: ACTIVITIES OF A SELF-REGARDING INSTITUTION

Activities Conducted Fall 1989 to Present

DEFINITION OF A SELF-REGARDING INSTITUTION

Peter Ewell, of the National Center for Higher Education Management Systems, argues that what holds true for assessing students also holds true for assessing the institution. The road to improvement of programs, courses, and indeed the institution itself, he notes, involves regular collection of information about institutional and program effectiveness and use of this information as the basis for improvement.

Peter Ewell describes a self-regarding institution as performing these four activities:

(1) DEFINES the outcomes it wishes to achieve
(2) Systematically OBSERVES whether those outcomes are being achieved
(3) INTERPRETS the meaning of observations
(4) Takes ACTION to achieve the outcomes more effectively

There are assessment activities which occur on-campus which do not directly measure student learning, but are nonetheless vital to the actualization of a self-regarding institution. Student and Institutional Outcomes (SIO) staff routinely respond to requests for data and reports by administration, faculty, staff and students. These numerous requests are strong evidence that SCCC is continually "defining," "observing," "interpreting" and "taking action." The reports generated are too numerous to print here, however, a sense of the type of information that is frequently shared can be found below.

EXAMPLES

Full-Time Equivalent Student Reports and Enrollment Figures

Determining the needs of a campus, the allocation of resources and the growth of the campus-body are crucial to the self-regarding process. Monitoring full-time equivalent students (FTES) and enrollment figures is, perhaps, the most important vital sign for the success of a state college. SCCC produces a variety of FTES reports and enrollment data for interpretation and action.

FTES reports are prepared for various levels within the institution:

State levels
CIP clusters
HEGIS codes

Institutional levels
Administrative units
Instructional programs
Faculty employment status
Day/evening time periods
Individual instructors
Individual courses

Measurement levels
Crosstabulations of variables
Percent of budget allocations
Percent of funded levels
Annual reports
Quarterly reports
Longitudinal reports

Student Demographic Information

Another measurement activity not directly related to student learning, but closely associated with many learning outcomes, is that of monitoring student demographic patterns. At SCCC, the following report activities occur regularly:

State levels
HEGIS codes
CIP codes

Institutional levels
Administrative units
Instructional programs
Individual courses
Individual instructors
Individual students

Measurement levels
Crosstabulations of variables
Longitudinal monitoring
Quarterly monitoring
Annual monitoring

Demographic characteristics
Age
Gender
Ethnicity
Student intent codes
Prior education
Grade point average
Number of quarters attending
Financial aid awards
Disabilities
Course-taking histories
Course completion

Student and Institutional Outcomes - Program and Course Completion

Perhaps the most obvious measures of student learning are course completion, grade distribution, credits earned and program completion. SIO staff routinely produce reports that document the student outcomes of courses and programs. The following information is included in these reports.

Institutional levels
Administrative units
Instructional programs
Individual courses
Individual instructors
Individual students

Measurement levels
Ratio of students to awards
Grade distributions
Course completion rates
Program retention
Post-SCCC education
Crosstabulations of variables

Demographic characteristics
Age
Gender
Ethnicity
Student intent codes
Prior education
Grade point average
Number of quarters attending
Financial aid awards
Disabilities
Course-taking histories
Credits earned
Awards earned

APPENDIX A: SEATTLE CENTRAL COMMUNITY COLLEGE STUDENT AND INSTITUTIONAL OUTCOMES REPORTS AND ACTIVITIES

(as of 4/92)

Below are the titles of several individual reports produced by the Title III Student and Institutional Outcomes Project. The reports are categorized, when applicable, according to the Learning Outcomes Dimensions on the SCCC of Student Learning. Some of these reports were used for documentation in the studies and reports found earlier in this document (the study or report number is listed to the left of the report title).

Study	**Critical Thinking**
Study 9	1. Coordinated Studies Longitudinal Study: Cornell Critical Thinking Test taken by CSP and non-CSP students, Winter 1991.
	Expertise
Study 8	2. Former SCCC Vocational Students Survey: to supplement state tracking study and vocational student follow-up survey, 1991.
	3. Annual SCCC Vocational Student Follow-up Surveys: employment surveys of professional/technical students (1981-1990).
	Fundamentals
	Placement Testing
Study 1	4. English Placement Test Scores by Developmental English and English 101 Grades, AY 1988-89.
Study 1	5. English Writing Sample Scores and Developmental English Grades, Fall 1988.
Study 2	6. Student Intent Codes, English Writing Sample Scores and Grades for English 101 and English 102, AY 1988-89.
Study 3	7. Analysis of Items on English Writing Sample to Determine Item Bias, Spring 1991.
	8. Transition to ACT Asset Testing System, AY 1990-91.
Study 5	9. Math Placement Test Scores by Developmental Math and Math 101 Grades, AY 1988-89.

Fundamentals

Study — English Courses

Study 2 — 10. Tracking Studies of Developmental English Students into College-Level Courses, AY 1988-89.

Study 2 — 11. Number of Quarters of Developmental English by English 101 and 102 Grades, Developmental English Quarters Summer 1985 to Spring 1989.

12. Faculty Survey on Writing Assignments: SCCC responses to a state-wide survey (Fall 1990).

English As A Second Language Courses

Study 4 — 13. Tracking Study of ESL Students into Developmental and English 101 Courses, English 101 Grades. ESL courses AY 1986-87 and 1987-88.

Study 4 — 14. Previous ESL Course History for ESL Students by ESL Course (Spring 1990).

Math Courses

Study 6 — 15. Tracking Studies of Developmental Math Students into College-Level Courses, AY 1988-89.

Study 6 — 16. Tracking Studies of Developmental Math Students into Math 101 and Math 105, Developmental Math taken AY 1986-87.

17. Individual Students Not Completing Math 084, Math 085, or Math 101 by Ethnicity, Spring 1989.

Multi-Cultural Literacy

18. Ethnicity by Program Enrolled, Fall 1986-1988.

19. Grade Point Average by Ethnicity, Fall 1986-1988.

Report 1 — 20. Curriculum for Cultural Pluralism: Six first-year and four second-year projects

21. Presentation of CCP Project to National Library Association Conference (Winter 1991).

Organizational Abilities

22. Computer Assisted Advising, Survey of Returning Students, Spring 1988

Multiple Outcomes

Study — Development of Student Learning Self-Evaluation Checklist:

Study 10 — 23. Development of "Ways of Knowing" Course, Fall 1989.

Study 10 — 24. Coordinated Studies Students vs. Other College Transfer Students (Winter 1991).

Study 10 — 25. School-Wide Surveys (Spring 1990 and Spring 1991).

Study 10 — 26. Factor Analysis of Student Responses to Spring Surveys (Spring 1990-1991).

27. Apparel Design Faculty Response Meeting (Winter 1991).

Study 8 — 28. Former SCCC Vocational Students Survey: to supplement state tracking study and vocational student follow-up survey.

29. Student Outcomes Library (on-going).

30. Comparison of "Student Learning Outcomes" for SCCC, Bellevue Community College, and North Seattle Community College (Fall 1990).

31. Content Analysis of CSP Student Self-Evaluation (Spring 1990).

SCCC Awards and Program Outcomes

32. Total Awards Received and Total Student Enrollment, AY 1986-87 to 1988-89.

33. Total Awards Received and Total Student Enrollment Fall Quarter, AY 1984-85 to 1988-89.

34. Total Awards Received by Program, Award Type, Gender, Ethnicity, AY 1984-85 to 1988-89

35. Tracking ESL vs. Non-ESL High School Students through Their SCCC Course Work and SCCC Outcome, First Quarter at SCCC Fall 1986.

36. Number of Developmental Courses Taken by Students Receiving SCCC Awards, Graduating Years 1984-85 to 1988-89.

37. CSP Courses, Grade Distributions and Student Completion Rates, Winter 1987 to Spring 1988.

38. CSP Courses, Grade Distributions and Student Completion Rates, Fall 1988 to Winter 1990.

39. Number of CSP Courses Taught by Faculty, Spring 1985 to Spring 1989.

SCCC Awards and Program Outcomes

40. Tracking Study of Students: Fall 1986 cohort. Variables: credits earned, type of awards, level of courses taken.

41. Tracking Study of Planned Length of Enrollment Vs. Actual Length of Enrollment: Winter 1987 cohort.

42. Outcome of All Maritime Training Students 1983-1990.

43. Grade Distributions by Administrative Units, Fall 1988.

44. Program Retention and Completion for Vocational Programs, AY 1986-87 to 1989-90.

45. District Incentive Grant locating students from SCCC now attending University of Washington or Western Washington University.

The Self Regarding Institution

Full Time Equivalent Student Reports:

46. Enrollment and Faculty Patterns for Selected Instructional Programs, 1982-1987.

47. FTES/FTEF and the Percent of Annual Change for All Administrative Units, Fall 1982-1988.

48. FTES/FTEF/Student-Faculty Ratios, 8-year Percent Change for Instructional Programs, Fall 1982-1988.

49. FTES/FTEF by Hegis Code, Fall 1986-1988.

50. FTES/FTEF/Student-Faculty Ratios by Administrative Unit and Program, Fall 1984-1988.

51. FTES/FTEF/Student-Faculty Ratios by Faculty Employment Status, Fall 1984-1988.

52. Percent of Funded Level by Administrative Unit and CIP Clusters, Fall 1989.

53. FTES/FTEF/Student-Faculty Ratios, Cluster 07-Education, Winter 1990.

54. Health and Human Services, FTES/FTEF/Student Faculty Ratios, AY 1986-87 to AY 1988-89.

55. FTES by Administrative Unit, Fall 1987 to 1989.

The Self Regarding Institution

56. Day and Evening FTES by Institutional Intent, AY 1985-86 to 1988-89.

57. FTES/FTEF by Faculty Employment Status for Administrative Unit, Winter 1990.

58. Apparel Design Quarterly FTES/FTEF/Student-Faculty Ratios by Faculty Employment Status, Fall 1985 to Winter 1990.

59. FTES by Administrative Unit, November 1988 vs. November 1989

60. Math Enrollments by Instructor, Quarterly, System, Summer 1986 to Spring 1990.

61. Evening Enrollments by Faculty Employment Status AY 1985-86 to 1988-89.

Budget Information:

62. Approved Budget and Percent of Total Budget by Administrative Unit, 1982-1990.

Student Demographic Information:

63. Demographic Characteristics of High School Aged, Adult Aged, and Woman Students for Fall 1985-1987.

64. High School Codes for Basic Studies Students, Fall 1987-1989.

65. Adult Basic Education Students, AY 1988-89: sex, age, ethnicity.

66. Grades/Credits/GPA/Gender/Ethnicity/Age All Students, Fall 1985-1989.

67. Gender Ratios for Targeted Math, Physics, and Engineering Courses Compared with Campus-wide Figures, AY 1987-88 and 1988-89.

68. "Policy Implications of Demographic Trends," PNAIRP Conference presentation; demographic changes and institutional response; vocational curriculum review; student outcomes.

69. Student Intent and Academic Program of Financial Aid Students, Spring 1989.

70. Developmental Courses Taken by Previous Nursing Program Students, as of Spring 1991.

71. SCCC Students with Previous Four-Year Degree by Student Intent, Program Enrolled, Gender, Ethnicity; Students enrolled Fall 1990.

72. Enrollment and Instructor for Desk Top Publication and Graphics Arts/Printing.

The Self-Regarding Institution

73. Ethnicity Ratios for Selected Vocational Programs, Fall 1989.

74. Enrollment History of Fall 1990 First Quarter Students, CSP vs. Non-CS by Student Intent, Previous College, Number of Quarters Attending.

75. Retention of Students, American Sign Language, Level I to Level V, Compared with Spanish and French.

76. Student Enrollment and Retention for Respiratory Therapy and Surgical Technology Programs, AY 1990-91.

78. SBCCE Developmental Student Tracking Study.

79. SCCC Student Outcomes Information Dissemination.

Off-Campus Reports, Presentations, Projects

80. Four issues of Inside Outcomes sent to other community colleges and state agencies (Winter and Spring 1991).

81. AAHE National Conference: presentations by faculty members (Spring 1991).

82. AAHE National Student Assessment Forum: presentation by faculty members (Spring 1990, 1991).

83. Community Colleges: consultation with faculty at Edmonds, Highline, Spokane Falls, (1990-91).

84. Change Magazine insert re: SCCC Student Outcomes efforts (Fall 1990)

85. PNAIRP Conference presentations by Planning and Research staff (Fall 1989, 1990, 1991).

86. Humanities Conference: presentation on tracking study of community college students to four-year institutions (Spring 1991).

87. Northwest Accreditation Association Annual Meeting: presentation of SCCC tracking studies (Spring 1991).

88. College Board annual conference: presentation with SBCCE about outcomes assessment (Spring 1991).

89. State-wide meeting of assessment liaisons: presentation of SCCC activities (Spring 1991)

Off-Campus Reports, Presentations, Projects

90. SBCCE Student Outcomes Assessment Conference: faculty and staff presentations (Spring 1990, 1991).

91. Student Outcomes Forum: introduction of Student Outcomes to the general campus (Spring 1989).

92. President's Day focus on Outcomes Assessment (Fall 1989).

93. Classroom Research Workshops begun (Fall 1989).

94. Learning Outcomes Workshops begun (Winter 1990).

95. College-wide Student Outcomes Forums (Winter, Spring 1990).

96. Outcomes Colloquia: 17 sessions; faculty presenting their experiences with student assessment activities (Winter 1991).

On-Campus Reports, Presentations and Workshops

97. Learning Outcomes Component to Curriculum Review Reports (1990-91).

98. Four issues of Inside Outcomes to campus (Spring 1991).

99. SCCC Instructional Council: student/faculty ratios (Fall 1990).

100. Breaking Out to Get Inside Outcomes: day-long orientation retreat for faculty (Spring 1991).

101. Vocational Follow-up Survey Data presented to vocational instructors (Spring 1991).

102. Coordinated Studies Research Projects presented at CSP Reporting Out Day. (Spring 1991).

103. Summary of Vocational Follow-Up Reports For Wood Construction Program (1982- 1989).

Additional Reports From Winter 1992

Campus-Wide FTES For Fall Quarters: 1979 - 1991.

Students In Science and Math Courses, Unduplicated Headcount, By Gender and Minority, Fall Quarters: 1985 - 1991.

Early Childhood Care and Education Enrollment Patterns, Summer 1989 through Winter 1992.

Part-Time Instructors, Administrative Unit, Course, FTEF, FTES, Tenth Day Enrollment, Spring 1992.

APPENDIX B: LISTING OF OTHER CAMPUS STUDENT OUTCOMES ACTIVITIES

During the past three years, The Title III Student and Institutional Outcomes has conducted many studies, forums, workshops, etc. related to the measurement of student learning. However, there are also several other student outcomes-related projects occurring at SCCC. Following is a listing of these activities that directly incorporate the SCCC of Student Learning into the project activities:

Coordinated Studies Projects: 11 projects, and a Catalogue of Issues, measuring a variety of student outcomes. Projects conducted between 1989-1991 (see Appendix D).

Classroom Research Projects: Classroom Research Workshops presented Fall and Spring Quarters 1989-1991. More than 50 faculty have conducted their own research activities regarding student outcomes. Workshops continue to be offered through Faculty Development Office.

Learning Outcomes Projects: 64 faculty attended Title III sponsored workshops on learning outcomes during 1989-1991, and then revised course curricula to reflect incorporation of the SCCC of Student Learning.

Alternative Pedagogies Projects: A series of workshops were conducted for faculty to revise their curricula, as well as their approach to student learning. 130 faculty have attended workshops offered 1988-1991. Workshops continue to be offered through the Faculty Development Office.

Curriculum Review Committee: Each department/program participates in a curriculum review process every three to five years. Beginning in 1990, during the curriculum review process, faculty are asked to describe how their current curriculum can be related to the learning outcomes listed in the SCCC of Student Learning.

Vocational Education Curricula Projects: From 1987 to 1992, 41 professional/technical faculty have revised the curricula for 12 professional/technical programs in the Title III Vocational Education project. This project guides professional/technical programs in the revision of their entire curricula, as a group process. The SCCC of Student Learning is a strong component of the revised curricula.

The "Ways of Knowing" Course Developed: Since Fall 1990, this humanities course has trained 82 students in four sections on evaluating their learning. Beginning Winter 1992, formal and consistent collection of data from these students will begin. The students enrolled in this course will measure the pulse of learning on our campus through detailed descriptive reports of their learning.

Case Studies as Assessment Tools: During 1991-92, two faculty members have been sponsored with state assessment funds to participate in case-writing assessment training through the Washington Center Learning Communities Evaluation Committee. A training workshop on "Cases" was conducted Fall 1991 for 40 faculty members.

Portfolio Assessment: During 1991-92, ESL and developmental English faculty have been working together to develop a portfolio assessment for their courses. The portfolios will include assessment of reading, writing, listening and note-taking. This activity is sponsored by state assessment funds.

State-Supported Assessment Activities

In 1990, the state legislature earmarked monies to promote assessment activities at each of the state colleges and universities. The state-supported assessment activities at SCCC have dove-tailed with other assessment activities on the campus. Specifically, during AY 1990-1991, five faculty members, representing five instructional units on campus, were given release-time to foster and promote assessment discussions and activities within their respective areas. Also during AY 1990-1991, four issues of an intra-campus newsletter, Inside Outcomes, was distributed throughout the campus. SCCC faculty have presented at each of the three annual state-wide assessment conferences. Other monies have allowed faculty members to attend national and international assessment-related conferences, and hire specialists to provide workshops on assessment activities.

APPENDIX C: THE STUDENT LEARNING SELF-EVALUATION CHECKLISTS

The Student Learning Self-Evaluation checklist is one of several instruments and strategies used at SCCC to measure learning. The history of the development of this instrument, and its relationship with the SCCC of Student Learning, can be found in Study 10 of this document. The following pages show versions 1, 4, and 5. These three versions have been used for the annual campus-wide surveys of students and faculty during Spring 1990, Spring 1991, and Winter 1992.

Version 1 - Spring 1990

SEATTLE CENTRAL COMMUNITY COLLEGE
MODEL OF STUDENT LEARNING
STUDENT SURVEY

Instructions: Using a pencil (not a pen), mark the number on the answer sheet (not the survey) which corresponds with your answers to the following question.

At the end of the quarter, as a result of what you are learning in this class, in which of the following areas do you feel you will have improved?

PREPARED FOR THE NEXT PHASE OF LIFE: FURTHER EDUCATION, A PROFESSION, PERSONAL OR COMMUNITY LIFE

Fundamentals

1. English reading/writing
2. Computer literacy
3. Computation
4. Oral communication
5. Information seeking/processing

Expertise

6. Mastery of discipline/vocation
7. Able to market mastery area

Organizational abilities

8. Able to work in groups
9. Able to navigate in a bureaucracy
10. Able to access/create systems for support

EDUCATED PERSON AND LIFE-LONG LEARNER

Multi-cultural literacy

11. Knowledge of ideas and experiences shaping human history
12. Ethics and values
13. Esthetic and creative expression
14. Interdisciplinary connection-making

Critical thinking

15. Defining Problems
16. Identifying relationships
17. Projecting consequences of actions
18. Reasoning, analysis, logic
19. Decision-making/problem/solving
20. Classifying, discriminating, ordering
21. Conceptualizing/abstracting
22. Combining theory and practice
23. Questioning
24. Constructing an idea and adding to a body of knowledge
25. Learning from experience

Life-long learning

26. Finding pleasure in learning
27. Curiosity about the world
28. Discovery
29. Self-reflective
30. Learning from mistakes: commitment to renew oneself
31. Satisfaction with SCCC experience

INFORMED CITIZEN OF DIVERSE, INTERDEPENDENT, CHANGING WORLD

Knowledge of diversity and interdependence

32. Knowledge of systems
33. Using cross-cultural perspectives

Social responsibility

34. Literacy: environmental, media, numerical, scientific, statistical
35. Awareness of connections: self and world
36. Community building

Version 4A - Winter 1991

SCCC STUDENT LEARNING SELF-EVALUATION

Thank you for helping to improve education at SCCC

PURPOSE: We want to improve the classes and programs at SCCC, and we want to find out from you what you think you are learning. This survey is not an evaluation of your teacher. It is not a measure of your ability to learn. This is a way for you to tell us what kinds of things you think you are learning in your classes at SCCC.

DIRECTIONS: Think about what you did and what you learned in THIS CLASS this quarter. Next, write a check in ANY of the boxes below if you think the statement about LEARNING OUTCOME is true.

CHECK BOX (a) if you talked about the LEARNING OUTCOME in this class.

CHECK BOX (b) if you had an assignment about the LEARNING OUTCOME in this class.

CHECK BOX (c) if you think you improved your skill or understanding of the LEARNING OUTCOME in this class.

If you do not understand what the words mean, ask for help. If you still do not understand the words, check the box in the shaded area.

IT IS OKAY IF YOU DO NOT CHECK MANY BOXES. NO ONE CAN LEARN ALL THESE LEARNING OUTCOMES IN ONE CLASS.

		IN THIS CLASS			
	LEARNING OUTCOMES AT SCCC	Yes, we talked about it	Yes, we had an assignment	Yes, I improved my skill or understanding	I do not understand
1	Reading English	( )	( )	( )	( )
2	Writing English	( )	( )	( )	( )
3	Using Computers	( )	( )	( )	( )
4	Using Numbers	( )	( )	( )	( )
5	Speaking and Listening	( )	( )	( )	( )
6	Looking for Information	( )	( )	( )	( )
7	Human History	( )	( )	( )	( )
8	Ethics and Values	( )	( )	( )	( )
9	Creative Expression	( )	( )	( )	( )
10	Ideas about Environment	( )	( )	( )	( )
11	Ideas about media	( )	( )	( )	( )
12	Ideas about different cultures	( )	( )	( )	( )
13	Ideas about economics	( )	( )	( )	( )
14	Ideas about science	( )	( )	( )	( )
15	ORGANIZATIONAL ABILITIES A few examples: Working in groups Knowing where to find help Finding information about school	( )	( )	( )	( )
16	CRITICAL THINKING A few examples: Thinking about new ideas Solving problems	( )	( )	( )	( )
17	LIFE-LONG LEARNING A few examples: Enjoying learning Developing curiosity about the world Learning about myself as a learner	( )	( )	( )	( )

LEARNING OUTCOMES AT SCCC		IN THIS CLASS			
		Yes, we talked about it	Yes, we had an assignment	Yes, I improved my skill or understanding	I do not understand
18	SOCIAL AWARENESS A few examples: Recognizing my goals and values Knowing how my actions affect things Respecting other people's goals and values	( )	( )	( )	( )
19	RESPONSIBLE ACTION A few examples: Cooperating with other people Changing my own environment Doing what I believe is right Giving and receving criticism	( )	( )	( )	( )
20	SELF-ESTEEM A few examples: Recognizing my strengths and limitations Willing to take risks to achieve goals Feeling confident	( )	( )	( )	( )
21	SELF REFLECTION A few examples: Learning from my mistakes Thinking about my learning Understanding my reasons for doing something Recognizing my goals and values	( )	( )	( )	( )

COMMENTS ABOUT YOUR SCCC EXPERIENCE

Please share additional thoughts and comments about your experience as a student at Seattle Central:

Version 5 - Winter 1992

SCCC STUDENT LEARNING SELF-EVALUATION

THANK YOU FOR HELPING TO IMPROVE EDUCATION AT SCCC

PURPOSE: Seattle Central is seeking your perceptions of your learning and intellectual growth. The information you provide below will be used solely to improve the educational experience for you and other students.

This is not an evaluation of your personal ability to learn, nor an evaluation of your teacher's style or personality. This is an assessment of the range of knowledge and skills you are learning at this college.

DIRECTIONS

1. This evaluation will take about 15 minutes to complete.
2. Before you begin, please take some time to think about your experiences in THIS particular course THIS quarter.
3. Next, consider your experiences with each of the Learning Outcomes listed below and then - -
   CHECK ALL THE BOXES THAT APPLY FOR EACH OUTCOME.

   CHECK BOX (L) - If you are sure that you did spend time LEARNING about this Learning Outcome.
   (Example: in lecture, class discussion, group projects, readings, etc.)

   CHECK BOX (F) - if you were given FEEDBACK about your performance on this Learning Outcome.

   CHECK BOX (I) - if you are sure you IMPROVED in this Learning Outcome.
   (This applies even if you did not have assignments or coursework for this Learning Outcome.)
4. CHECK BOX (?) - if you DO NOT UNDERSTAND this Learning Outcome.

NOTE

If you notice you are not filling in several boxes, do not worry, no one can have all these experiences in one class.

PLEASE TURN TO PAGE ONE AND BEGIN THE SURVEY . . .

LEARNING OUTCOMES AT SCCC
(Page One)

CHECK ALL BOXES THAT APPLY FOR EACH OUTCOME. If none of the boxes applies, DO NOT CHECK ANYTHING IN THAT ROW.	Yes, I spent time LEARNING about this Outcome (L)	Yes, I was given FEEDBACK on my performance in this Outcome (F)	Yes, I did IMPROVE my skill or understanding of this Outcome (I)	I DO NOT UNDERSTAND what is meant by this Outcome (?)
Ability to Market One's Skills	[ ]	[ ]	[ ]	[ ]
Aesthetic and Creative Expression	[ ]	[ ]	[ ]	[ ]
Computer Use	[ ]	[ ]	[ ]	[ ]
Economic Issues	[ ]	[ ]	[ ]	[ ]
English Reading	[ ]	[ ]	[ ]	[ ]
English Writing	[ ]	[ ]	[ ]	[ ]
Environmental Issues	[ ]	[ ]	[ ]	[ ]
Ethics and Values	[ ]	[ ]	[ ]	[ ]
Ideas and Experiences Shaping Human History	[ ]	[ ]	[ ]	[ ]
Information Seeking	[ ]	[ ]	[ ]	[ ]
Mastery of Course Material	n/a	[ ]	[ ]	[ ]
Media Issues	[ ]	[ ]	[ ]	[ ]
Multicultural Issues	[ ]	[ ]	[ ]	[ ]
Numerical Use	[ ]	[ ]	[ ]	[ ]
Oral Communication: Speaking and Listening	[ ]	[ ]	[ ]	[ ]
Scientific Issues	[ ]	[ ]	[ ]	[ ]
Critical Thinking *(For example: questioning; defining problems; identifying relationships between ideas; discriminating, classifying, ordering; projecting consequences of actions; putting theory into practice.)*	[ ]	[ ]	[ ]	[ ]
Life-Long Learning *(For example: finding pleasure in learning; developing curiosity about the world; learning about oneself as a learner.)*	[ ]	[ ]	[ ]	[ ]
Knowledge of Social Systems *(For example: ability to access support systems; ability to function within bureaucracies.)*	[ ]	[ ]	[ ]	[ ]

PLEASE TURN TO THE OTHER SIDE AND CONTINUE . . .

LEARNING OUTCOMES AT SCCC
(Page Two)

CHECK ALL BOXES THAT APPLY FOR EACH OUTCOME. If none of the boxes applies, DO NOT CHECK ANYTHING IN THAT ROW.	Yes, I spent time LEARNING about this Outcome (L)	Yes, I was given FEEDBACK on my performance in this Outcome (F)	Yes, I did IMPROVE my skill or understanding of this Outcome (I)	I DO NOT UNDERSTAND what is meant by this Outcome (?)
Responsible Action *(For example: recognize, articulate and act on one's convictions, goals, or values; recognize and critique ethical issues; understand and assume the consequences for one's actions; preserve one's individuality while working for a common good.)*	[ ]	[ ]	[ ]	[ ]
Self-Esteem *(For example: recognize one's strengths and limitations; maintain physical fitness or wellness; enjoy self-confidence; willing to take risks to achieve goals.)*	[ ]	[ ]	[ ]	[ ]
Self-Reflection *(For example: learning from experience; understanding personal motivations; reflecting on one's thinking processes.)*	[ ]	[ ]	[ ]	[ ]
Social Interaction *(For example: flexibility; able to effect change in one's environment; valuing or respecting the life experiences and development of others; able to give and take criticism; able to manage conflict.)*	[ ]	[ ]	[ ]	[ ]
Social Responsibility *(For example: awareness of the connection between oneself and the world; using cross-cultural perspectives; able to work collaboratively within diversity; taking responsibility for the next generation.)*	[ ]	[ ]	[ ]	[ ]

COMMENTS ABOUT YOUR SEATTLE CENTRAL EXPERIENCE

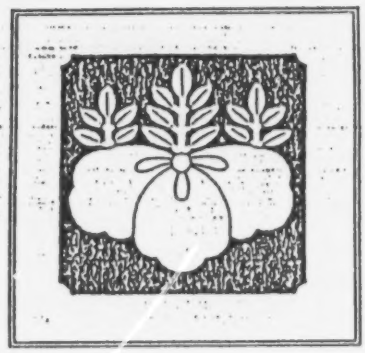
Please share additional thoughts and comments about your experience as a student at Seattle Central.

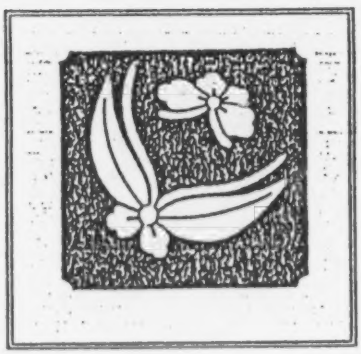
THANK YOU VERY MUCH. PLEASE RETURN COMPLETED SURVEY TO YOUR INSTRUCTOR.

FILE: SELFEVAL.WK3-dre

APPENDIX D: EVALUATION FOR COORDINATED STUDIES: RESEARCH ABSTRACTS

The studies and reports presented earlier in this document have almost exclusively been supported by the Title III Student and Institutional Outcomes Project and the Planning and Research Office. However, other assessment activities have also occurred on the SCCC campus. Another Title III project supported 11 faculty research activities assessing the learning that occurs in Coordinated Studies programs. Summaries of the research activities were previously reported in the document entitled, "Research Abstracts, 1989-1991, Title III Project 1.3, Evaluation For Coordinated Studies." Appendix D contains the contents of this report.





RESEARCH ABSTRACTS 1989 - 1991 TITLE III PROJECT 1.3 EVALUATION MODEL FOR COORDINATED STUDIES

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INTRODUCTION

You have here summaries of faculty research into Coordinated Studies at Seattle Central Community College. This work began in the fall of 1988 when several faculty members added to Seattle Central's Title III grant a request for monies to analyze the Coordinated Studies Model in order to "further develop and improve curriculum." After a quiet beginning in 1984, Coordinated Studies at SCCC had grown; programs seemed to be everywhere in the school. Restructuring the curricula so that "two to five faculty organize an interdisciplinary learning experience around a theme" allowed faculty and students to become partners in the learning process, "leading to greater student involvement and responsibility in the learning process." This new model for teaching and learning "elicited enthusiasm and excitement from students, faculty, and administration," but it is time, the grant writers argued, to study it more carefully:

- to look closely at what happens to students in a Coordinated Studies model,
- to adapt and refine the methodology to address the specific needs of the diverse populations at Seattle Central, and
- to define and communicate better how students learn in Coordinated Studies programs, adding to the growing body of expertise in the methodology. Such an assessment at this point is vital to coordinated studies in terms of program improvement and student and faculty development.

The monies were forthcoming and the faculty bravely set out with their plan for research. Everyone interested in Coordinated Studies served as the Advisory Committee, and volunteers served short stints on the smaller Task Force which carried the grant work ahead by holding research training workshops, reviewing proposals, and overseeing the work of the faculty researchers.

The Winter 1989 Task Force surveyed CSP faculty to discover what they wanted ask about the model, what issues concerned them. The "Catalogue" which resulted served as one guideline for developing research projects from the Spring of 1989 through the Spring of 1990. We include it here, following the abstracts of research undertaken to address the faculty concerns.

Upon review of the abstracts, you see that some researchers focus on certain questions included in the catalogue and address them squarely. Jim Kelsey and Jim Hubert take on the fundamental task of characterizing the CSP population as compared to the general population of the school (V.B). Tracy Lai, Minnie Collins, and Gilda Sheppard question whether or not CSP's fulfill the mission of the school by engaging a diversity of students (V.B). Both Susan Jones and Sandra Hastings inquire into the success of teaching English 101 composition skills in CSP programs (IV.F,H) They approach the question in different ways and provide different answers.

Other projects research methods of routinely getting information. Rather than asking specific questions, they try to find ways which may be used regularly to get information we want about student attitudes, the particular nature of learning in CSP's, specific program attributes, successes, and so on (I, II, IV, V). We hope to find the appropriate evaluation model, one that maintains the immediacy of Pat Cross methods of classroom research but also allows for wider application of its findings. Carl Waluconis and Caryn Cline wonder what we can learn, and what students can learn, from ongoing video observation of program activity. Valerie Bystrom, Minnie Collins, Jan Ray, and Nancy Finley wonder whether taping faculty conversation at the ends of programs will maintain a feedback loop for thinking about improvement of programs.

Other researchers developed ways to understand what difference CSP's make. Audrey Wright compares student kinesics in a traditional classroom setting and in CSP settings to see if there is a difference between the two in the nature and number of non verbal acts which regulate the back and forth nature of speaking and listening. Sandra Schroeder tested a more objective instrument for discovering the learning dimensions

in developmental classes as a first step toward finding the correlations and differences among learning in developmental CSP's and college transfer CSP's. Rosemary Adang's archive project offers a foundation for even more statistical inquiry. She gathered information that faculty can use in planning programs but also data that lends itself to longitudinal studies which may be reported to larger audiences.

Nancy Finley interviewed participating faculty about what difference CSP's make, and published her summary of faculty responses in Educational Record. Another ambitious project, coordinated by Carl Waluconis, invited all CSP students to write end of the quarter narrative self evaluations which allowed faculty readers to explore what difference CSP's make to students. Waluconis includes a comparison of intellectual and personal gains in CSP classes compared to traditional classes. (The narrative self evaluation proves an excellent way to gain information about learning in CSP's and a powerful tool for learning in the program.)

Faculty research under Project 1.3 has not answered all the questions in the Catalogue nor explored all the ways to find the answers. And, we must add, since the Winter of 1988, our innovative work with learning communities has fostered more issues. The faculty projects presented here record what questions we have addressed and what methods we have tried and what suggestions we make--so far--in the ongoing evaluation for improvement of Coordinated Studies at Seattle Central Community College.

STUDENT STATISTICAL PROFILE

Jim Hubert
Jim Kelsey

PURPOSE AND QUESTIONS

Our study sought a statistical profile of CSP students. Underlying the profile issue was the question of whether there is a quantifiable, statistically significant difference in the students who take CSP courses compared to those who do not.

METHODOLOGY

The colleges' computer data base provided the basic data resource. In order to be able to ask some "before" and "after" questions about CSP students the cohort approach was adopted. This meant that the data base was searched to select students based on whether they took one, more than one or no CSP courses until sufficient numbers were obtained.

Part of the student selection process involved obtaining sufficient numbers in each of the selected categories. It was desirable that the sample be large enough so that cross classifications (non CSP students who are Asian, for example) contained significant numbers of students. This constraint led to the inclusion of 859 students in the sample data base.

Once the selection was made the results were tabulated by characteristic. Characteristics included the following:

Quantitative Measures	Qualitative Measures
Age Years Since High School Credits • Cumulative Earned • Registered for in CSP Quarter • Earned in CSP Quarter • Earned Prior to CSP • Earned After CSP GPA • Cumulative • CSP Quarter • Prior to CSP • After CSP Algebra Placement Exam APS Computation Score California Reading Test Score	Gender Ethnicity Financial Aid Recipient Prior College Student Intent Institutional Intent Humanities Writing Sample Score

For the quantitative measures the mean and standard deviation were calculated along with 25th and 75th percentiles, medians, minima and maxima. For the qualitative measures only the proportion was calculated. Finally, for each variable the total used from the database and the number missing in this category was determined. The "missing" measure requires significant additional information to be of much use, since data

may be missing for a variety of reasons ranging from "not reported" or "data entry error", through "not required" or simply "not available".

Finally, significance tests were conducted on all variables testing the hypothesis that the means (for quantitative data), or the proportions (for qualitative measures), were equal at a 95% level of significance using either a standard normal or a Student's "t" test statistic depending on the sample size. The mean age, for example, was compared for students who took either one CSP course or who took more than one CSP course with those who took no such course. "Passing" this test says that the data does not support the alternate hypothesis that there is a statistically significant difference between the mean values for these student categories.

FINDINGS

The only measures for which significant differences were noted were "Age" (and the corresponding measure, "Years Since High School") and "Student Intent". These results showed that non_CSP students tended to be older and that a higher proportion of CSP students are transfer students. More importantly, our findings indicate no significant difference between CSP and non-CSP students.

IMPLICATIONS

Given the constraints of the student data base our research was not able to pursue a variety of interesting questions. Surveys of CSP and non-CSP students to assess and compare skills, attitudes, aptitudes, etc. would provide additional insight.

MINORITY/PEOPLE OF COLOR ENROLLMENT IN COORDINATED STUDIES PROGRAMS FROM 1984-89

Tracy Lai
Gilda Sheppard
Minnie A. Collins

PURPOSE AND QUESTIONS

Did Coordinated Studies Programs (CSPs) from 1984 to 89 at Seattle Central Community College reflect the ethnic/racial diversity of its population? Answering this question became the purpose of our research. We chose to research this concern because our observations and queries suggested that this alternative pedagogy did not reflect the two goals of our college's Mission Statement: Access and Diversity.

METHODOLOGY

Summer, 1989, was the beginning of our research process. With the assistance of a Project Research Technician, we wrote and evaluated essential questions that were necessary for collecting the best figures from the Research and Planning Office. Following this step, came the analysis of enrollment data and the identification of Students of Color in 40 different CSPs.

FINDINGS

Our team reported that from Spring, 1984 to Spring, 1989, approximately 1, 875 students were enrolled in 40 CSP classes. The number of programs has been as few as 1 per quarter to a high of 9 per quarter. In all of the 40 classes, 63% were White, 11% were Asians, 12% were Black, 3% were Hispanic, 2% were Native Americans and 9% were listed as Other.

These findings suggest that CSPs attracted Whites, Native Americans, Hispanics, and African Americans in proportion to their distribution in the college's general population during this time.

Most notable was the low representation of Asians in CSPs. Although 55% or 173 students of the 315 Asian students were enrolled in Coordinated Studies, they were registered for Transitional studies/classes. Forty five per cent or 142 Asian students were enrolled for other CSPs.

Key to the enrollment for both Asians and African Americans was the content, familiarity with instructors,and support

services such as teacher accessibility and tutoring. In fact the titles/themes had to be culturally meaningful for them.

IMPLICATIONS

Research about the enrollment of Students of Color in CSPs must continue to focus on the programs that have attracted the largest number of students. Needed is a comparison of where these students were. Were a majority in College Transfer of Pre-College programs?

Coordinated Studies, an excellent alternative pedagogy for teaching and learning has retained over 78% of its students. Knowing the success of this program, faculty must reevaluate their curriculum and propose cogent cross-cultural curriculums that attract more Students of Color, especially Asians and African Americans.

Responding to this need, this research team wrote and implemented the first cross-cultural curriculum, Speaking for Ourselves during Winter, 1990. This class attracted a significantly higher percentage of Asians and African Americans in the College Transfer classes. Volunteers from these students helped faculty plan the course content and were teacher assistants for writing groups. For students who needed more intensive help, a Master Tutor met students after class and on preparation days. Asians,however, were under-represented in the class enrollment.

Our faculty must create more CSP classes with themes that explicitly explore theories and modalities of populations not usually represented in CSP classes (African, African American, Native American, Latin/Mexican, Hispanic, Asian and Pacific Islander, etc.). During the curriculum review process and other areas of faculty development, we encourage more pedagogical workshops that present Afrocentric and other cultural specific methodologies of instruction.

Advising, one of the first places of information for students must know the details of each CSP. In fact, teams must market their programs through advising in order to attract Students of Color.

With the Research and Planning Office, we propose that further studies investigate why/why not and where Students of Color are in Coordinated Studies Programs.

Improvement of Writing Skills in a Coordinated Studies Program; Based on Writing Samples from CSP 100, The Power of Myth

Susan T. Jones

Purpose and Questions

This report and the classroom research project which it describes were motivated by a concern about whether student writing skills developed sufficiently during a coordinated studies program to warrant the offering of college transfer composition credits.

Methodology

By examining student writing done at the beginning of such a program, CSP 100, "The Power of Myth," and comparing it with writing done at the end of the quarter, the improvement in students' writing skills, or the lack of such improvement, would be measured. During the first week of class students viewed a short film and immediately afterwards wrote a brief in-class essay discussing the central metaphor in the film. During the last week of class the same students viewed a similar film and were again asked to write a short in-class essay discussing the central metaphor.

These short papers provided the writing samples which were evaluated using an instrument which rated five distinct writing skills on a scale of one to five. The skills were: the ability to focus on a single idea and thus produce a unified paper, the development of this central idea with details and examples, the appropriateness of language usage, the organization of the paper, and the correctness of the writing mechanics. The papers were not evaluated for improvement in content. At the end of the quarter, each student was required to write a self evaluation including comments about the student's perception of whether his writing skills had improved.

Findings

The results of the study were presented in the form of a table which included the total scores of each student and the scores for each skill area. The table also included a notation indicating whether the student felt his or her writing had improved. The results of this study indicated ' that the students showed the most improvement in the areas most stressed by the instructors: development with specific supporting details (the area of greatest improvement), unity of purpose, and effective organization. The area of least improvement was writing mechanics. The study indicated that improvement in writing skills did occur during the coordinated studies program, and that the overwhelming majority of students felt that their writing had improved.

Implications

It thus seems that it is entirely reasonable to offer college-transfer composition credits as part of the menu of credits available in a coordinated studies program, particularly when the selection of such credits is optional and students also have the option of not electing a writing credit but can use the opportunity to improve their skills without being graded on the results It would be interesting and useful to see research which compares the improvement of writing skills in students in coordinated studies with the improvement of students in traditional composition classes.

AN ANALYSIS OF WRITING IN CSP: "THE GLOBAL VILLAGE"

Sandra Hastings

PURPOSE AND QUESTIONS

My hypothesis for the proposal, derived from many CSP classes in which I was the "English" or writing faculty was as follows: Due to the constraints on writing teachers' contacts with the CSP students and the generally complex connections they are asked to develop in essay assignments and exams, students should have English 101, taken in a traditional class, as a prerequisite. My purpose or goals were to improve the writing skills of community college students taking a CSP program and thus, to improve the grade point and retention.

Because I had been concerned about my own ability to teach writing in a CSP class as well as I can in a traditional English 101 class, I used The Global Village class as a laboratory. I asked for information from the students about prior writing experience, pre- and post writing samples, and end-of-quarter student evaluations, reflections on their learning.

METHODOLOGY

Briefly, my method was as follows: Students who finished the class were given numbers and their pre-and post in-class writings as well as the evaluations were read and scored based on eight of the concepts about writing well that were presented during the quarter. I did wait until six months after the class was over, hoping that I would not then be influenced by what I knew of the students, to read the materials. In the report itself I quoted many comments the students made on the evaluations so that I would have both my numerical assessment as well as their perceptions. I considered their scores in the writing, their own evaluation and their final grade to see if their writing skills affected their grade.

FINDINGS

Among the conclusions I report that most students did not feel prepared to do the writing. One student who had English 101 in a traditional class before this CSP class said, "I would maybe put a requirement on English 101 . . ." Of the total students who got grades, fifteen of them were not negatively affected by their writing skills. Twenty-one of the thirty-six were negatively affected. Sixteen students who had traditional English 101 received an average final grade point of 3.1; seven students who had English 101 in a prior CSP class received an average grade point average of 2.3, and eleven students who had no prior college English received an average of 2.7. Just this quarter (Spring, 1991), a student who had English 101 in a traditional setting from me, who is taking a CSP class now, said that he was grateful for the background in writing that he'd gotten; it helped him do the writing and other students who were less prepared were having difficulty in the class.

IMPLICATIONS

I continue to feel strongly that, given the diversity of academic backgrounds in this open door school and the common lack of significant writing experience prior to college, English 101 in a traditional classroom or writing samples demonstrating competence should be required for CSP students. Traditional writing classes are smaller and the contact and writing content more intense; in addition, there is the time to repeat the concept so that the student not only knows about it but it has been incorporated into his writing.

VIDEO PROJECT

Caryn Cline
Carl Waluconis

PURPOSE AND QUESTIONS

The goal was to discover if viewing the video tapes taken from the continual taping of a Coordinated Studies Program could provide a method of exploring and evaluating a specific program and Coordinated Studies in general.

METHODOLOGY

"The Televised Mind", a Coordinated Studies Program in place during Fall, 1988, at Seattle Central Community College, was taped very often from the beginning until the end. In the program, four instructors and over seventy students studied the effects of media. The introduction of a camera into the classroom was done in part to talk about concepts of visualization.

During the first of the quarter, faculty operated the camera, but soon students also took that position. During a program evaluation session, in which the entire class had to produce a product to show the faculty at the end of the day, students on their own brought two cameras to tape the planning and accompanying debates.

Over thirty hours of raw footage was eventually obtained. Two faculty from the program, Caryn Cline and Carl Waluconis, viewed the footage with the idea of creating a short video which would reflect what occurred in that specific program, and to some degree reflect what occurs in Coordinated Studies in general.

FINDINGS

The viewing of the tapes during the Summer of 1989 was a surprisingly rich experience which lead to a host of new ideas involving possibilities for evaluating what is going on in a classroom. What began as a long logging process for editing turned into conversations about what had occurred in the program and changes for the next time the program was taught (Spring, 1990).

Having the students operate the camera was valuable in that it literally allowed the faculty to "see" the classroom from a student perspective. Also, watching some students change during the quarter was dramatized when different tapes were juxtaposed. Seeing tapes from early in the quarter, and watching students who eventually dropped the program, could help collect early warning signals concerning troubled students.

The final tape which was produced is 28 minutes long. It reconstructs major themes and learning processes which occurred in "The Televised Mind" that quarter. It reflects Coordinated Studies Projects in general to the degree that any one program can reflect a series of programs in which each is created from the chemistry of the individual members, both students and faculty. It is available for viewing at Seattle Central Community College.

IMPLICATIONS

Video tape is a viable tool for the classroom which has just begun to be explored. Evaluating a student performance/presentation or a faculty lecture are standard ways video tape is now used. This project indicated other directions, and we felt we had only begun to explore those.

When the theme of a course or program is video, film or television, we feel the component of taping as the program proceeds was invaluable. However, taping could also be used for seminars or small groups to access their own previous meetings. As the content or teaching methods change from program to program, other uses for video taping could be found. The costs, compared to other kinds of equipment, are relatively low. The "technophobia" and fear of a camera, on the part of both students and faculty, could be overcome through repeated exposure. Neither of these obstacles should prevent the introduction of a video camera into a Coordinated Studies or any other classroom as a method of evaluation that enhances the learning process.

FACULTY DEBRIEFING MODEL FOR COORDINATED STUDIES

Valerie Bystrom
Jan Ray
Minnie Collins
Nancy Finley

PURPOSE AND QUESTIONS

Our experience has been that at the end of a quarter a teacher is nearly overwhelmed by a complicated assessment process as she considers the class just completed. The rush of ideas, new admonitions about classroom organization, new theories about how to sequence the material, all come at just the time when there is little time to do much but have the ideas. We may intend to note things down, don't, and then may or may not remember how we thought to improve a class. Faculty on this research team decided that we could not afford to lose the important thinking that occurs as programs draw to end. The descriptions, reflections, suggestions, insights, and cautions that fill that minds of faculty teams may be the best resource as we work to develop the Coordinated Studies pedagogy at SCCC. Therefore, the research team proposed a way to keep track of ongoing practice at the end of each quarter, to record faculty ideas about how to make Coordinated Studies programs work better. The question was, Would it work?

METHODOLOGY

The team offered to debrief SCCC CSP faculty teams. The term "debriefing" was borrowed from The Washington Center and simply refers to a long conversation between a facilitator, or debriefer, and the faculty of a Coordinated Studies program. The Center began these end of the quarter conversations to help keep abreast of what is going on in various programs in various institutions but early on recognized how beneficial these talks were for faculty just starting out in what were for many of them high risk teaching situations. The Evaluation research team proposed using the debriefing structure to promote faculty conversation with the purpose of using this information to improve forthcoming programs.

In June of 1990 the Project 1.3 research team held a "debriefing day." Everyone in the Coordinated Studies community was invited. All faculty debriefed. If a teacher was in a spring program, she debriefed with her team and a facilitator (debriefer). If not in a program, she simply debriefed with other faculty and a facilitator. Each facilitator had a list of questions appropriate for the group: for instance, for a group not in a program for the spring, one question was, "What did you do differently in classrooms this quarter because of your CSP experience?" The discussion of each group was recorded on sound tape. These tapes were collected and kept by the research team but are available to the several faculty.

These small groups debriefings were followed by a general session when faculty were invited to tell about especial successes in their programs. This session was video taped.

The team held this debriefing afternoon in a regular large CSP classroom and themselves provided food and beverage. To decide how well the afternoon worked as way to regularize faculty feedback on CSP work, the team reviewed evaluations by those who attended.

FINDINGS

Faculty responded well to the debriefing afternoon. Conversation was rich, information was shared.

IMPLICATIONS

The success of the debriefing afternoon makes clear we should maintain something like it in our ongoing CSP work. We have recommendations about how we might do this:

- Set dates early for quarterly debriefings of program faculty. Once a year, in the spring, follow the program debriefings with a general session.

- Make the focus for the spring general session a reporting out of work done in common. Select a certain evaluation project as part of overall CSP work for a year, make it "The Work at Large." All CSP faculty would work at and question some aspect of CSP practice and possibility (like narrative student self-evaluations) and present their ideas, findings, etc. at the general session.

- As part of a quarterly schedule, have students and faculty set certain goals for a program, hold mid-quarter SGID's for faculty and students, revise the program according to SGID recommendations, then debrief at the end of the quarter to report out the success of the improvement.

- Provide training for faculty facilitators (debriefers). Encourage faculty about to move into a program to work as debriefers.

The debriefing afternoon represents just a start for SCCC faculty. Certainly faculty response suggests that we should encourage each CSP team to set aside time at the end of a quarter to have a wrap up conversation (debriefing). Especially for faculty who intend to repeat a program, simply debriefing and somehow recording the conversation may seem sufficient. However, it is important to develop more ways to communicate the ideas developed in these conversations to a larger group.

To establish each year a "Work at Large" for the CSP community seems daunting because the organization of Coordinated Studies at Seattle Central remains informal. Deciding on a "Work at Large" and then making such research part of all program work would require a high level of faculty involvement at all stages. A simple method would be to ask certain debriefing questions ("Did you students express unrest about the fifth week and what did you do about it?") of each program over a year. A even grander aim would be to have CSP faculty district wide take on an inquiry in common so that the end of the year session would be a meeting of faculty across campuses. That the faculty very much enjoyed the end of the year get together, for the very fact that they got together, makes clear that the Coordinated Studies community at SCCC would benefit from and should better encourage faculty meet and work together as an interested group.

STUDENT KINESICS: REGULATING THE REGULATORS

Audrey J. Wright

PURPOSE AND QUESTIONS

This project looks at the relationship between the kinesic response between students in a coordinated studies program (CSP) setting and students in a 'traditional' classroom setting (TC) with an attempt to provide student feedback to instructors. Kinesics, in this case, is limited to the type referred to as regulators or nonverbal acts which maintain and regulate the back and forth nature of speaking and listening between two or more interactants. They tell the speaker to continue, repeat, elaborate, hurry up, become more interesting, give the other a chance to talk, and so forth. Unfortunately, the awareness of regulator signals is sometimes very subconscious without a conscious response provided at the time of its appearance. This project tries to take a conscious look at specific regulators in both a traditional and in a coordinated studies program to see if there is a difference in regulator usage. Given the often stated nature and implications of coordinated studies, regulators would be different, especially in situations such as 'seminar' settings.

METHODOLOGY

By analyzing a corpora of still shot transparencies taken from a coordinated studies program and from a traditional class situation, certain basic regulators are documented, classified and analyzed as being positive or negative student feedback.

FINDINGS

To date the findings are indecisive, mainly because, there are at least 400 more stills to be processed, viewed and analyzed before a final conclusion can be made since the final photographic session does not end until the end of May 1991.

IMPLICATIONS

Implications are strong in terms of providing impetus for the continued growth and development of coordinated studies programs. If it does turn out that students do provide different, more positive types of regulators, instructors may find that it will be necessary to respond to students differently in coordinated studies. Student feedback is essential in any instructional communication system and is involved in all interaction involving students and instructors.

An Evaluation Instrument for Developmental Students Based on the "Model for Student Outcomes"

Sandra Schroeder

Purpose and Questions

The goal for my research was "to create an evaluation instrument based on the Model for Student Outcomes that was easily accessible to developmental students and easily interpreted by researchers. Although I stated no question in my grant request, !t would be "Can such an instrument be developed and used to generate meaningful statistical information?"

My purpose was to develop such an instrument (survey) so that the responses of students in developmental CSP classes could be measured against those in non-CSP programs to see if the CSP students responded yes (or positively) to any wider range or any different mixture of outcomes than those In non-CSP classes.

Methodology

My method was to use consultation and testing to move from a simple checklist to a questionnaire. I formed an advisory committee of developmental English teachers (those who had classes Summer 1991) and consulted with them at various stages of the drafting and testing process; I administered the survey in a field test to all summer English developmental classes (there were no CSP classes that quarter); and I discussed the survey with the students who had used it to get their reactions. Based on my findings, I did a final revision which I submitted to the CSP Task Force in Fall 1990.

Some guiding principles I used in drafting and revising the survey were that developmental students would understand questions better than phrases on a checklist; that questions should ask about types of experiences they might have had in classes and not about abstract principles; that the vocabulary should be practical and not pedagogical; and that a cross-check in the form of written responses to open questions would be helpful to researchers.

Findings

Based primarily on oral and written responses from the students, it seemed that the draft survey tested was more understandable than the original checklist had been but because of its length and comprehensiveness it was awkward to administer and tabulate.

I also found that a small but significant number of students are extremely cynical about any type of survey or questionnaire. Some completed the survey so quickly that I doubted they had really read the questions. However, this group was balanced by students who reported that they found the survey interesting and helpful because it made them think more comprehensively about

their education. They were also pleased that the college was interested in their opinions.

Although students reported that they understood the questions, discrepancies in their answers led me to believe they did not understand the implications of some questions or how to relate them to actual class experiences. After class discussions, over 50% of the students responded that they would now change their answers to some of the questions. In response, I added explanatory introductions to most of the sections to point out implications some students might miss (among other changes noted in my Report submitted in Fall

1990). Because of problems with the test draft and because there were no CSP programs Summer 1990, no reliable statistics were generated.

In Fall 1990 the revised survey was administered in several classes. Students responded that it was too lengthy. The addition of the explanations may have clarified some issues but tried the patience of those who had to read them. Revisions have since been done by members of the Student Outcomes Task Force, particularly Geoff Mathay, and administered to students. Each revision solves some problems but creates others.

IMPLICATIONS

A perfect tool for evaluating developmental (and other) CSP classes will not be created. But a quantifiable measure of student outcomes is a worthy goal, and work should continue on this project. Any means that can show that CSP classes address more outcomes than non-CSP classes will help justify their cost.

The redundancies in the Model for Student Outcomes should also be explored and eliminated so that it expresses itself clearly and efficiently. If it is to be useful, it needs to be understandable not only to teachers but to students, legislators, and the business community.

PROGRAM PROFILES PROJECT

Rosemary Adang

PURPOSE AND QUESTIONS

Our goal in doing this project was to provide Seattle Central faculty and administrators, faculty and administrators from other institutions, and members of the larger educational community with a library of resource information on all Coordinated Studies Programs that have occurred at Seattle Central since their inception in 1984. This archive can serve as an historical record, as a resource bank for planning future coordinated studies programs and other cross-disciplinary programs, and as information essential to faculty who are developing assessment methods appropriate to Coordinated Studies pedagogy.

METHODOLOGY

During Spring quarter of 1990, I met with Jan Ray and other members of the Task Force to discuss the parameters of the project. We decided to try to gather as much of the following information as possible for each program: titles and numbers; flyers and related publicity; break down of credits; number of students enrolled; number of student completing; student grades; syllabi, including booklists; list of supplemental readings, films, videos, guest speakers; and copies of important handouts. During the spring and summer I requested information from all faculty members who had taught in any Coordinated Studies Program. I also worked with the division staffs to track down information already available. Jack Bautsch and Geoff Mathay provided the necessary statistical data, which I complied in a usable form. In addition to the information we asked for, Jack was able to provide data on student ethnicity. With the help of Valerie Bystrom I set up a file system so that each program has a file, each file includes in the program profile information, and different types of programs (eighteen hour, thirteen hour, vocational, etc.) are color coded. After discussion with Dean Ron Hamberg, we decided to keep maintain two sets of these files: one in the library, not to be used outside the library, and one in the faculty lounge for easy access to faculty. We have attached a user friendly guide to each file.

IMPLICATIONS

Not all the files are complete. This archive depends on the cooperation of faculty. We recommend that someone be responsible for establishing files, gathering program documentation, and maintaining the files quarter by quarter. How useful it is and how it is used will be determined in the next few years.

Collaborative Teaching and Learning at Seattle Central Reflections of Participating Faculty 1984-1989

Nancy J. Finley

Purpose and Questions

In the past five years, increasing numbers of Seattle Central faculty have been experimenting with a collaborative model of teaching and learning referred to as Coordinated Studies Programs (CSP's). The essence of this movement lies in its collaboration among faculty groups to create inter-disciplinary programs which are designed to increase students' involvement in their own education. With the assistance of Title III funds, CSP faculty have taken the responsibility to develop an evaluation model appropriate for CSP's. The purpose of this study was to gather impressions about CSP's from all faculty who had taught in these programs from 1984-1989.

Methodology

Thirty-four of these individuals were interviewed during Summer and Fall quarters, 1989, and asked to comment on the effect of the CSP experience on themselves, on students, and on the institution as a whole. They were also asked to describe elements of an effective team teaching experience.

Findings

The most significant effect of the CSP experience seems to be faculty development. The majority of those interviewed reported becoming intellectually stimulated and revitalized as a result of the experience. Making connections with colleagues also served a faculty development function. The majority of the respondents indicated that CSP's may not be appropriate for all students, but potential gains for participating students included concept development, learning how to learn, self-awareness and confidence, and learning to work in groups. A few faculty expressed concern about inappropriate placement of students in CSP's and poor quality of Coordinated Studies program offerings.

Concerns about the future of CSP's in the context of Seattle Central included: logistics/long and short range planning, continued administrative support, the "image" of CSP's, and concerns about faculty. In the view of most of the interviewees, effective team dynamics appear to depend upon shared goals, flexibility, and an atmosphere of respect and trust.

Implications

Recommendations pertaining to the future of CSP's at Seattle Central center around maintaining, or in some cases, strengthening connections with each other and with concerned groups and individuals on and off campus. In order to further develop an evaluation model, further research is required, especially follow-up studies of students who have participated in CSP's.

SELF-EVALUATION PROJECT

Carl Waluconis

PURPOSE AND QUESTIONS

The immediate goal of the project was to provide a description of the way in which those enrolled in Coordinated Studies programs at Seattle Central Community College perceived their learning - its content, its value, and its effectiveness. The larger question was whether narrative self-evaluation would provide an effective institutional means of evaluating Coordinated Studies Programs.

METHODOLOGY

For two quarters, each of the faculty teams teaching interdisciplinary coordinated studies programs at Seattle Central Community College were asked to collect narrative self-evaluations from their students. A team of ten faculty then read the essays, each essay being read three times. The faculty marked and scored each essay, indicating if the student stated that he or she had made gains in certain outcomes. The outcomes looked for were those which faculty had indicated earlier were especially strong in the interdisciplinary, team-taught programs. The outcomes focussed on were: gains in a sense of self-esteem and community, gains in knowledge of ideas and experience and associations between them, gains in becoming a life-long learner, and gains in fundamentals. Each reader highlighted the passages while identifying the outcome, and the highlighted passages were collected into a lengthy appendix to the report.

The scores reflected no large disagreements between faculty, who were all reading the essays separately. If two of the three faculty indicated that a student described growth in an area, than it was scored that the student had, while evaluating their learning, perceived that they had made gains in that area.

FINDINGS

The results showed that during the Fall, 1989, and Winter, 1990, quarters at Seattle Central Community College, as a part of what they learned in the Coordinated Studies Programs in which they were enrolled: 84.27% of the students whose self-evaluations were read described gains in a sense of self-esteem and community; 92.42% of the students described gains in knowledge of ideas and experience and associations between them; 77.53% of the students described gains which indicated they were becoming life-long learners; and, 76.12% of the students described gains in fundamentals.

The following chart compares the above numbers with those generated in a "checklist" survey of students. The first column contains the
percentages gained from reading the students' self-evaluations, a listing of those given above. The second column contains the results of the checklist survey given in CSP's during Spring of 1990. The third column has the results when random students enrolled in non-linked classes took the survey during the Spring of 1990.

FINDINGS

Outcomes	Self Evaluations	Survey CSP:S	Survey Class
SENSE OF SELF & COMMUNITY	87.3%		
Self-esteem: recognizing strengths & limits		68.6%	57%
Understanding personal motivations		73.7%	56%
Self-confidence		69.5%	60%
Managing stress and change		50.8%	20%
Risk-taking		56.8%	60%
Awareness of connections: self & world		80.5%	51%
Community building		48.3%	40%
Sensitivity/respect for others		76.3%	64%
Valuing life experiences & development of others		75.4%	46%
KNOWLEDGE OF IDEAS & EXPERIENCES SHAPING HISTORY	92.4%	80.5%	46%
Interdisciplinary connection making		72.0%	53%
Constructing an idea & adding to body of knowledge		75.4%	52%
LIFE-LONG LEARNER	77.5%		
Learning from experiences:mistakes & successes		80.5%	70%
Finding pleasure in learning		85.6%	63%
Curiosity about the world		83.9%	41%
Discovery		77.1%	59%
Learning from mistakes: commitment to renew		84.7%	70%
FUNDAMENTALS	76.1%		
English reading/writing		89.8%	71%
Computer literacy		40.7%	34%
Computation		8.5%	33%
Oral communication		79.7%	57%
Information seeking/processing		72.0%	57%

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IMPLICATIONS

The use of self-evaluations as a means to explore students' perceptions of learning is a logical and natural source of rich material regarding education. Continuing this process with Coordinated Studies Programs at Seattle Central Community College would give faculty a clear view of how students are perceiving the programs. In addition, the use of narrative student self evaluations has proven to emphasize learning for students and give students a greater ownership and responsibility concerning their own learning.

The chart, only a cursory study at this point, indicates that students in Coordinated Studies Programs perceive that they are making greater gains. The chart and subsequent surveys also
indicate that when writing an essay, students describe that they have learned more than when taking a checklist survey. It is possible that the act of writing the essay serves to broaden their perspective of learning.

In any case, the meaning the students are making of the learning is an important indicator of the value the learning has. Using the process of students writing about their own learning will help us to understand that meaning.

The self-evaluation process in Coordinated Studies Programs should continue at Seattle Central Community College. The results are a rich indicator of learning which occurred in the programs. Turning the essays into numbers still has unexplored possibilities, but the richness of the essays indicates that they could also be used as a permanent record of student learning.

A Catalogue of Issues That Concern Coordinated Studies Faculty

Note: **This may look like a questionnaire, but we do not mean for you to answer the questions. Rather, we'd like for you to add more questions. The answers to the questions and other concerns will b the work of our research.**

I. Issues of Philosophy and Pedagogy

A. How does the integration of process and content work in coordinated studies?

B. How do the parts of the CSP model work? Which are more essential? Why?
   1. What is accomplished in a good book seminar? How can we tell?
   2. What do we want students to gain from this kind of program? How do we measure it?
   3. What makes a successful group project?

C. What are the important commonalities between developmental and college transfer coordinated studies?

II. Student Issues

A. How do we understand and deal with attrition, absenteeism, tardiness, walkmans, lack of participation, the fifth week rebellion, end of the quarter panic, lack of completion, nostalgia the last quarter, and other behaviors we observe in the students?

B. What does the model encourage students to do in learning situations? How?
   1. Are cooperation and altruism implicit goals?
   2. Are intellectual gains possible in coordinated studies that are not possible in traditional courses?

C. Is there a mix of disciplines in a coordinated studies program that is optimal for the students?

D. Does study in a coordinated program require more self discipline than study in traditional classes? If so, how can we encourage the self discipline that is needed for success?

E. How do students fare when they return to traditional classrooms?

III. Faculty Issues

A. What are the possibilities for team generation? Who decides?
   1. Do all disciplines get a fair shake?
   2. Is there any discrimination on the basis of sex or race?
   3. How do we get people from other schools?

B. Does how a team is selected affect their satisfaction?
   1. Does how a team is selected effect the success of the program? (As measured by retention, student satisfaction, grade distribution, skills improvement.)
   2. Does faculty dissonance affect students' performances?

C. What is the effect of having part-time instructors? (What is the effect of full time faculty? Why is this an issue?)
   1. How satisfied are the part-time instructors?
   2. What is the effect on the program?
   3. Do full-time faculty accept and support part-time instructors?

D. Can we identify the commonalities of a good team?
   1. When one is working right, how is it working?

2. Is there a relationship between the disciplines represented on a team and the success of the team?

E. Is there jealousy among and therefore a lack of support from faculty in separate programs which offer the same or similar content?

IV. Curricular and Skills Issues

A. Is the CSP model appropriate for developmental students whose main concern is work on skills?
   1. What is the offset for advantages of building skills versus the support system of a CSP?
   2. Are seminars useful or necessary enough to include when skills building requires so much time?
   3. How do we identify appropriate texts for seminaring at the developmental level?
   4. Do the needs of developmental students call for different models of coordinating across the curriculum? What models are available? How would each affect those involved?
   5. What is the optimal load expectation?

B. Are our testing and placement procedures adequate to insure that students are placed in classes appropriate to their current ability?

C. Does the model work for students who do not self select into the program?
   1. Do students who enroll because regular skills classes are closed fare well?
   2. What about students who arrive late and are placed in CSP because nothing else is open?

D. Is vertical mixing of skills appropriate in CSP programs?
   1. What happens in these mixed classes to students at the different skills levels? In developmental classes? In college transfer classes?
   2. What happens to students who then take a next course in a skills sequence in a traditional classroom?
   3. Are CSP instructors and instructors in traditional classrooms expecting the same skills and the same level of performance?

E. Should college transfer and developmental skills instructors (especially ESL instructors) work on transitions among ESL and pre-college and regular college transfer classes? Are the transitions as smooth as they could be?

F. Is the teaching of writing skills being shared among faculty in CSP programs?
   1. How should writing instruction be presented?
   2. Who should be responsible?
   3. How successful are different models?

G. Are there skills required in coordinated programs not required in traditional courses, and, if so, what are they and how are they taught?

H. How do the writing skills of people who get their English 101 and 102 instruction in CSP programs compare to those of students in traditional composition courses?

V. College Wide Issues

A. How does Coordinated Studies relate to the rest of the curriculum?
   1. Should we make one Coordinated Studies program a requirement for every student pursuing an AA at SCCC?
   2. Are the outcomes of Coordinated Studies so powerful that we want every student to have the experience?
   3. What has been the effect of Coordinated Studies on classroom teaching in the traditional curriculum?
   4. Are there things which should not be taught as part of a CSP?

B. Does Coordinated Studies fulfill the mission of the college? Is it designed to meet the needs of the cross section of students?
   1. Does who is teaching make a difference in who enrolls?
   2. Is there diversity in the groups that enroll?

C. What physical conditions support CSP programs?
   1. Are there optimal time limits for parts of the model?
   2. Are there space requirements? What can and can't work?
   3. Are there numbers--of subjects, students, teachers--that work better than others?

D. Has the CSP effort aided the success of the college? Is there statistical evidence?
   1. Do CSP's retain students at a higher rate?
   2. Do more CSP students transfer to four-year schools?

E. Has the CSP effort added to student success? Is there statistical evidence?
   1. Is the range of grades given in CSP programs similar to that in traditional classrooms?
   2. How do students fare at transfer institutions?
   3. How do students fare in higher level programs?

F. Should we propose better planning and recruitment procedures?
   1. Can we have too many CSP programs?
   2. What is the relationship between the number of programs offered and the enrollment in them?
   3. What is the best way to schedule these classes? Who should do it? When?
   4. How is the balance between time in class and credits awarded struck? Is it the same for all CSP's? Should it be?
   5. What are successful ways of recruiting students? Do we take advantage of them?
   6. Who should be recruited?
   7. Are appropriate referrals made among developmental CSP's?
   8. Are there optimal ways of getting developmental students into CSP's?

APPENDIX E: A CHRONOLOGY OF STUDENT ASSESSMENT ACTIVITIES

HIGHLIGHTS OF SEATTLE CENTRAL'S OUTCOMES ASSESSMENT EFFORTS

1987-88

* The Student Outcomes Task Force was established, comprised of approximately 20 faculty, staff, students and administrators.

* Task force members and other faculty members participated in a pilot study by the HEC Board which investigated and eventually prevented the use of standardized tests for writing and mathematics.

1988-89

* Task force members familiarized themselves with the issues involved with outcomes assessment. They read materials, attended conferences and visited other colleges.

* Nationally-recognized experts Peter Ewell and Patricia Hutchings consulted with the Student Outcomes Task Force.

* The task force reached consensus about a set of learning outcomes for the college.

* A new course, entitled "Ways of Knowing," was introduced to help students assess their own learnings in relation to the identified outcomes. The course has been taught each quarter since Fall, 1989.

1989-90

* President's Day 1989 was devoted entirely to the topic of outcomes assessment. AAHE's Pat Hutchings delivered a keynote address.

* Faculty began to use the outcomes matrix to design and evaluate courses. Curriculum development stipends were awarded for this purpose.

* The Curriculum Review Committee revised the format for curriculum review to include a section on learning outcomes.

* Longitudinal and survey research was conducted to see how effectively the learning outcomes were being achieved. Former vocational students were surveyed to assess their exposure to and achievement of the identified learning outcomes.

* Student services staff were surveyed to determine the extent to which they were instrumental in helping students achieve the learning outcomes.

* Task force members presented at the Fifth Annual AAHE Assessment Forum and at the SBCCE's assessment workshops.

* A college-wide outcomes survey of was conducted, involving 750 students and faculty. Results were presented at a college-wide forum.

* The Curriculum for Cultural Pluralism Project was established to award curriculum development grants to teams of faculty to revise curricula to infuse cultural pluralism, one of the identified learning outcomes.

1990-91

* AAHE's Change magazine of September-October, 1990, highlighted the work of Seattle Central in a major article on assessment.

* The college was invited to discuss its outcomes work at several community colleges and at the Northwest Accreditation Association's meeting in December, 1990.

* Five Assessment Coordinators were hired to work with faculty and staff to critique and apply the learning at the department and program level.

* Colloquia were held for faculty to share with colleagues how they have effectively incorporated outcomes assessment into their classes. Presenters spoke of their work in an number of projects, including Learning Outcomes, Alternative Pedagogies, Curriculum for Cultural Pluralism, Vocational Education Curricula Revision.

* The second college-wide outcomes survey was conducted of 900 students and faculty. Factor analysis of survey results was initiated.

* Each faculty member (N=211) was surveyed about one course he/she was teaching and how it addressed the identified learning outcomes.

* The Cornell Critical Thinking Test was administered to Coordinated Studies and non-Coordinated Studies students. No significant differences were found.

* In May, 1991, a workshop/retreat was held to train faculty and staff on (1) classroom research, (2) specifying and measuring learning outcomes at the course level, and (3) incorporating a learning outcomes orientation within student services. Forty-five participants attended.

* Fifty-one faculty and staff attended a "Multi-cultural Issues Planning Day" in September, 1991. Various groups which had focused on multi-cultural issues met for join planning purposes.

1991-92

* A study examining the outcomes of Coordinated Studies was initiated by the National Center for Assessment, Teaching and Learning. Principal investigator is Vincent Tinto.

* In October, 1991, Student Outcomes staff presented at the annual conference of the Pacific Northwest Association for Institutional Research and Planning in Reno, Nevada.

* Pat Hutchings, Director of the AAHE Teaching Initiative, conducted a workshop on the writing of "cases." Thirty-five faculty attended.

* A third college-wide survey of learning outcomes was administered to 700 faculty and staff. The results were tabulated and factor analysis conducted. On the basis if the factor analysis, a refined set of learning outcomes is emerging. This listing will be discussed with faculty in Spring quarter, 1992.

* President Dr. Charles Mitchell and Research Director Dr. Jack Bautsch described Seattle Central's outcomes assessment work at the AACJC Annual Convention in Phoenix, AR, in April 1992.

* **Learning Outcomes Forum '92** was held in April 1992. The forum will (1) honor those who have revised curriculum in light of the of Student Learning, (2) showcase several projects conducted by faculty, and (3) present the results of the third college-wide survey of learning outcomes and invite faculty to consider the refined set of learning outcomes.

* In May 1992, Seattle Central faculty and staff presented aspects of the college's outcomes assessment work at the Third Annual Washington State Assessment Conference in Spokane, Washington.

* Seattle Central faculty members Dan Loos and Karen VanGenderen presented at the Annual AAHE Assessment Forum in Miami Beach, FL, in June 1992. They described a multi-dimensional portfolio approach to assessment of reading, writing, listening, and note-taking skills for ESL students.

* English faculty member Carl Waluconis presented at the International Conference on Assessing Quality in Higher Education, in Enschede, The Netherlands in July 1992. He described the methods for incorporating student self-reflection into a comprehensive assessment program.

* Carl Waluconis taught other community college instructors how to design a student self-evaluation class similar to the Ways of Knowing class he designed and taught at SCCC as part of the Title III Student Outcomes project.

* Studies and reports conducted since the Student Outcomes Project began were summarized in a book format. Major findings and implications were identified for each study. This project continued throughout fall, winter and Spring quarters.